Environmental Compliance Survey Final Report

Prepared for

The Federal Bureau of Prisons USP Canaan

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Environmental Compliance Survey of Federal Bureau of Prisons

USP Canaan

Performed By Aarcher Inc.

I Executive Summary

A. An environmental compliance survey was conducted by Aarcher Inc. for the Federal Bureau of Prisons; USP Canaan, Wayne County, Pennsylvania. Jay Collert performed the survey for Aarcher Inc. Representatives from the Bureau of Prisons were Dennis Forman, Bob Cherry, Stephen Flannery, Ezell Jackson Jr., Mike Lucas, and Robert Scinta.

B. The survey was conducted at USP Canaan, in Waymart, Pennsylvania. The facility is located in the most northeastern county in Pennsylvania, 20 miles east of Scranton, and 134 miles north of Philadelphia.

C. The United States Penitentiary, located in Waymart, Pennsylvania, is a high security institution housing male inmates, with a satellite camp that houses male minimum security inmates.

D. According to the pre-survey information data sheet submitted prior to the survey, USP Canaan has an inmate and staff population of approximately 1,968.

E. The survey was performed using state and federal-specific protocols dated September 2006 (Pennsylvania protocols), and August 2006 (federal protocols). Survey findings are categorized into the following areas:

   a. Priority 1: Areas with actual or potential immediate harm to human health or the environment, potential for significant liability, or other potential to inhibit the institution from meeting its mission or the mission of the Federal Bureau of Prisons.

   b. Priority 2: Regulatory findings that are not Priority 1. These include Federal and state laws, regulations, and applicable Executive Orders.

   c. Priority 3: Non-regulatory findings that are not Priority 1 or Priority 2.

F. USP Canaan is located in Pennsylvania and applicable protocols for that state were used. Items that have no state equivalence or when the state incorporates by reference the Federal requirement, the Federal citation is indicated and used. The compliance areas surveyed and a summary of findings in each of the different levels are as follows:

1. Air Emissions
    a- Priority 1: - 1
    b- Priority 2: - 2
    c- Priority 3: - 0
2. Water Quality
    a- Priority 1: - 0
    b- Priority 2: - 0
    c- Priority 3: - 0
3. Waste water Quality
    a- Priority 1: - 0
    b- Priority 2: - 0
    c- Priority 3: - 0
4. Hazardous Waste Management
    a- Priority 1: - 0
    b- Priority 2: - 0
    c- Priority 3: - 0
5. Universal Waste/Used Oil Management
    a- Priority 1: - 0
    b- Priority 2: - 1
    c- Priority 3: - 0
6. Tank Management/SPCC
    a- Priority 1: - 0
    b- Priority 2: - 5
    c- Priority 3: - 0

7. Oils/Hazardous Substances Spills and Reporting
    a- Priority 1: - 0
    b- Priority 2: - 0
    c- Priority 3: - 0
8. Medical/Bio Wastes
    a- Priority 1: - 0
    b- Priority 2: - 0
    c- Priority 3: - 0
9. Environmental Training
    a- Priority 1: - 0
    b- Priority 2: - 1
    c- Priority 3: - 0
10. Miscellaneous Requirements
    a- Priority 1: - 0
    b- Priority 2: - 0
    c- Priority 3: - 0

II Survey Findings – USP Canaan

A. Air Emissions

1. **Audit Finding:** PRI 2 – AE – 001: Leak calculations on Refrigerant Equipment

   a- **Activity/Operation**: The institution utilizes staff personnel who repair and recycle equipment that contains refrigerants.

   b- **Requirement**: IAW 40 CFR 82.156(h), owners/operators of refrigerant-containing equipment that contains more than 50 pounds of Class I or Class II refrigerant must calculate the leak rate whenever the refrigerant-containing equipment requires recharging or a repair is necessary.

   c- **Finding**: According to facility personnel, the institution has units that hold more than 50 pounds of refrigerant. And, according to personnel, refrigerant has been added in the past, thereby requiring leak calculations.

   d- **Recommendation**: Perform an institution-wide survey to ensure that all equipment holding more than 50lbs of Class I and Class II type refrigerants are identified. Develop a procedure that requires leak rate calculations on all equipment holding more than 50lbs of refrigerants whenever refrigerants are added due to leaks. Train all employees responsible for refrigerant recycling/recovery once those procedures are developed and implemented.

2. **Audit Finding**: PRI 1 – AE – 002: Air Permit Requirements

   a- **Activity/Operation**: The institution has been granted three air quality permits from the state of Pennsylvania for the operation of industrial boilers.

   b- **Requirement**: IAW the state issued general permits – 64-302-007GP; 64-302-008GP; and 302-009GP – the institution is required to comply with all aspects of the permits when operating the industrial boilers.

   c- **Finding**: In reviewing the permit-required strip recorders for the three permitted boilers, exceedances were noted for NOx. The permit limitation for NOx is 30 ppm. Readings from the strip recorders were as high as 67 ppm NOx. A review of past recordings shows very few readings below the permit requirement of 30 ppm. The permits state that when any pollutant is exceeded, reporting is to be on a quarterly basis. The institution was not reporting on a quarterly frequency.

   d- **Recommendation**: Start quarterly reporting immediately to the state, IAW with the issued general permits. Ensure the boiler operators are

aware of permit requirements, especially in regards to the emission limitations of pollutants so that when they review the daily strip recordings, they will know when the boilers have exceeded the permit requirements.

3. **Audit Finding**: PRI 2 – AE – 003: Air Monitoring Equipment

   a- **Activity/Operation**: The institution has been granted three air quality permits from the state of Pennsylvania for the operation of industrial boilers.

   b- **Requirement**: IAW the state issued general permits – 64-302-007GP; 64-302-008GP; and 302-009GP – the institution is required to maintain, operate, and calibrate air monitoring equipment according to the manufacture's instructions.

   c- **Finding**: Calibration of the air monitoring equipment has not been performed nor is there any records indicating the maintenance and calibration have ever been performed.

   d- **Recommendation**: Determine what maintenance and calibrations are required on all air monitoring equipment and establish a procedure which will ensure all required actions are taken at the frequency recommended by the manufacturers of the permit-required air monitoring equipment.

B. Water Quality

   1. **No Findings**

C. Waste Water Quality

   1. **No Findings**

D. Hazardous Waste Management

   1. **No Findings**

E. Universal Waste/Used Oil Management

   1. **Audit Finding**: PRI 2 – UW – 001: Waste Oil Labels.

      a- **Activity/Operation**: The facility generates waste oil as defined by 25 PA § 298.10(a).

      b- **Requirement**: IAW 25 PA § 298.22(c)(1-4), labels with the words "waste oil" will be placed on all containers/tanks/pipes holding waste oil. (Federal requirements specify a "used oil" label be on all containers. Pennsylvania requirements specify a "waste oil" label be placed on all

containers. Institution personnel were unaware of the state requirement, which became effective in 2003)

c- **Finding**: In the garage area, containers holding waste oil were not labeled.

d- **Recommendation**: Procure waste oil labels and ensure all containers/tanks/pipes holding waste oil that is to be recycled are labeled. Also ensure that all containers/tanks/pipes that hold waste oil are closed except when adding and removing the waste oil, the containers/tanks/pipes are compatible with the waste oil, and the containers are not leaking and are in good condition.

F. Tank Management/SPCC

1. **Audit Finding**: PRI 2-TM-001: Self-Imposed ICP Requirements

a- **Activity/Operation**: The institution stores in above ground containers/tanks over 1320 gallons of oil/petroleum.

b- **Requirement**: IAW 40 CFR 112.7, facilities that have more than 1320 gallons of oil/petroleum in above ground storage tanks must prepare and maintain a Spill Prevention, Controls and Countermeasures Plan (SPCC). The SPCC Plan, at the discretion of the institution, may be combined into an Integrated Contingency Plan as long as all of the SPCC elements are contained in the plan and a cross reference is included if the plan does not follow the order listed in 40 CFR 112.7.

c- **Finding**: After reviewing the institution's ICP, listed requirements in the plan were not being followed throughout the facility. The ICP contained requirements that mandate all fuel oil valves, piping, and process units are inspected weekly; tanks and above ground piping are inspected 3 times/month; and that all 55-gallon containers are to be placed on spill pallets. No evidence existed all of these requirements were being followed.

d- **Recommendation**: Requirements that are placed in the ICP must be followed. Recommend requirements written in the ICP that are above and beyond those listed in 40 CFR 112.7 be modified to reflect more reasonable requirements.

2. **Audit Finding**: PRI 2 – TM – 002: Incomplete ICP/SPCC Plan

a- **Activity/Operation**: The institution stores in above ground containers/tanks over 1320 gallons of oil/petroleum.

b- **Requirement**: IAW 40 CFR 112.7, facilities that have more than 1320 gallons of oil/petroleum in above ground storage tanks must prepare and maintain a Spill Prevention, Controls and Countermeasures Plan (SPCC).

The SPCC Plan, at the discretion of the facility, may be combined into an Integrated Contingency Plan as long as all of the SPCC elements are contained in the plan and a cross reference is included if the plan does not follow the order listed in 40 CFR 112.7.

c- **Finding**: After reviewing the ICP, the following elements of the SPCC Plan were missing or incorrect:

- Regulatory cross-reference is incomplete; does not list the regulatory citations for the SPCC plan – pg 25.
- Management approval statement certifying that appropriate resources will be expended to comply with the plan is missing.
- Does not contain the 5 attestations as required 40 CFR 112.3(d) – pg 27.
- Guidelines addressing secondary containment around bulk storage containers do not contain the calculations which illustrate the 150% volume requirement listed on pg 22.
- Facility map does not indicate direction/source of spills likely to occur.
- Does not contain an explanation of how a spill will be controlled in the undiked drainage areas of the institution.
- Containment is not addressed around the transformers that hold 55-gallons of oil or more.
- While the aboveground containers (tanks) have an inspection checklist for the visual inspection, a second inspection using another method is not listed but rather is suggested – pg 23.
- An inspection and the accompanying checklist must be maintained in the plan for aboveground containers; specifically containers that hold 55-gallons or more. Only the inspection checklist for tanks was found on pg 21.
- Plan indicates oil leaks must be reported within 24 hours of discovery – pg 22; oil leaks that enter navigable water and creates a sheen must be reported to the NRC immediately.
- The plan indicates that refueling areas do not have containment; therefore an environmental equivalency must be described, but could not be found in the plan.

- The plan does not address whether the piping in and around the tanks at the institution has secondary containment or any containment.

- Three underground storage tanks (2 grease traps and 1 oil/water separator) holding regulated oil are described in the plan but inspection procedures and other requirements are not listed.

d- **Recommendation**: Update/add all of the missing and incorrect elements of the SPCC Plan so the ICP contains all of the regulatory elements of 40 CFR 112.7.

3. **Audit Finding**: PRI 2 – TM – 003: Inaccurate ICP/SPCC

   a- **Activity/Operation**: The institution stores in above ground containers/tanks over 1320 gallons of oil/petroleum.

   b- **Requirement**: IAW 40 CFR 112.7, facilities that have more than 1320 gallons of oil/petroleum in above ground storage tanks must prepare and maintain a Spill Prevention, Controls and Countermeasures Plan (SPCC). The SPCC Plan, at the discretion of the facility, may be combined into an Integrated Contingency Plan as long as all of the SPCC elements are contained in the plan and a cross reference is included if the plan does not follow the order listed in 40 CFR 112.7.

   c- **Finding**: After reviewing the ICP/SPCC Plan, a requirement exists for a log to be maintained verifying fuel levels, maintenance, and inspections being performed on a periodic basis. This log could not be found.

   d- **Recommendation**: Comply with all requirements listed in the SPCC/ICP plan and ensure a documented verification can be produced.

4. **Audit Finding**: PRI 2 – TM – 004: Tank Monitoring

   a- **Activity/Operation**: The institution stores in above ground containers/tanks over 1320 gallons of oil/fuel.

   b- **Requirement**: IAW 40 CFR 112, fail safe devices must be installed on tanks to prevent overfilling.

   c- **Finding**: The gas and diesel tanks have no visual gauge or audible alarm indicating when the tank is full.

   d- **Recommendation**: Install a fail safe device on these tanks and include the device in the ICP/SPCC Plan.

5. **Audit Finding**: PRI 2 – TM – 005: Spill Prevention Response Plan

a- **Activity/Operation**: The institution has aggregate storage capacity of over 21,000 gallons of petroleum.

b- **Requirement**: IAW 25 PA § 245.603 which incorporates by reference the PA Storage Tank and Spill Prevention Act (Act 32-1989) and implemented by the PA DEP as part of the Storage Tank Program, the institution is required to develop and maintain a Spill Prevention Response (SPR) Plan. The plan must contain specific information and must be submitted to the county and local Emergency Management Agencies, local fire service agencies and/or HAZMAT team, local emergency medical service agencies, and the local police. For a complete list of requirements for the SPR Plan, see the document "Guidelines for the Development and Implementation of Environmental Emergency Response Plans", dated August 6th, 2005 which can be found in Section IV.

c- **Finding**: A SPR Plan could not be located during the survey.

d- **Recommendation**: Develop and implement a compliant SPR Plan as soon as possible and submit the plan to all the required agencies.

G. Oils and Hazardous Substances Spills and Reporting

1. No findings found in this area.

H. Medical/Biohazard Wastes

1. **No findings found in this area**.

I. Environmental Training

1. **Audit Finding**: PRI 2-TNG-003: SPCC Training

a- **Activity/Operation**: The institution stores in above ground containers/tanks over 1320 gallons of oil/petroleum.

b- **Requirement**: IAW 40 CFR 112.7(f)(3), all oil handling employees must be trained at least once a year to ensure adequate understanding of the SPCC plan.

c- **Finding**: No record of this training could be located at the institution.

d- **Recommendation**: Start training all oil handling employees at least once a year and documents the training and the personnel who attended.

J. Miscellaneous Findings

1. **No Findings in this area.**

III Federal Rules

The following citations were used to support the findings based on federal regulations. The citations are listed in numeric order.

more than 1.5% of the refrigerant received by them.

(j) Effective November 15, 1993, no person may sell or distribute, or offer for sale or distribution, any appliances, except small appliances, unless such equipment is equipped with a servicing aperture to facilitate the removal of refrigerant at servicing and disposal.

(k) Effective November 15, 1993, no person may sell or distribute, or offer for sale or distribution any small appliance unless such equipment is equipped with a process stub to facilitate the removal of refrigerant at servicing and disposal.

(l) No technician training or testing program may issue certificates pursuant to §82.161 unless the program complies with all of the standards of §82.161 and appendix D, and has been granted approval.

(m) No person may sell or distribute, or offer for sale or distribution, any substance that consists in whole or in part of a class I or class II substance for use as a refrigerant to any person unless:

(1) The buyer has been certified as a Type I, Type II, Type III, or Universal technician pursuant to §82.161;

(2) The buyer complies with §82.166(b) and employs at least one technician who is certified as a Type I, Type II, Type III, or Universal technician in accordance with §82.161;

(3) The buyer has been certified in accordance with 40 CFR part 82, subpart B and the refrigerant is either R–12 or an approved substitute consisting wholly or in part of a class I or class II substance for use in motor vehicle air conditioners in accordance with 40 CFR part 82, subpart G;

(4) The buyer complies with §82.166 (b) and employs at least one technician who is certified in accordance with 40 CFR part 82, subpart B, and the refrigerant is either R–12 or an approved substitute consisting wholly or in part of a class I or class II substance for use in motor vehicle air conditioners pursuant to 40 CFR part 82, subpart G. Nothing in this provision shall be construed to relieve persons of the requirements of §82.34(b) or §82.42 (b);

(5) The refrigerant is sold only for eventual resale to certified technicians or to appliance manufacturers (*e.g.*, sold by a manufacturer to a wholesaler, sold by a technician to a reclaimer);

(6) The refrigerant is sold to an appliance manufacturer;

(7) The refrigerant is contained in an appliance with a fully assembled refrigerant circuit; or

(8) The refrigerant is charged into an appliance by a certified technician or an apprentice during maintenance, service, or repair of the appliance.

(n) It is a violation of this subpart to accept a signed statement pursuant to §82.156(f)(2) if the person knew or had reason to know that such a signed statement is false.

(o) Rules stayed for consideration. Not withstanding any other provisions of this subpart, the effectiveness of 40 CFR 82.154(m), only as it applies to refrigerant contained in appliances without fully assembled refrigerant circuits, is stayed from April 27, 1995, until EPA takes final action on its reconsideration of these provisions. EPA will publish any such final action in the FEDERAL REGISTER.

(p) No person may manufacture or import one-time expansion devices that contain other than exempted refrigerants.

[58 FR 28712, May 14, 1993, as amended at 59 FR 42956, Aug. 19, 1994; 59 FR 55926, Nov. 9, 1994; 60 FR 14610, Mar. 17, 1995; 60 FR 24680, May 9, 1995; 61 FR 7726, Feb. 29, 1996; 61 FR 68508, Dec. 27, 1996; 68 FR 43806, July 24, 2003; 69 FR 11979, Mar. 12, 2004; 70 FR 19278, Apr. 13, 2005]

§82.156 Required practices.

(a) All persons disposing of appliances, except for small appliances, MVACs, and MVAC-like appliances must evacuate the refrigerant, including all the liquid refrigerant, in the entire unit to a recovery or recycling machine certified pursuant to §82.158. All persons opening appliances except for MVACs and MVAC-like appliances for maintenance, service, or repair must evacuate the refrigerant, including all the liquid refrigerant (except as provided in paragraph (a)(2)(i)(B) of this section), in either the entire unit or the part to be serviced (if the latter can be isolated) to a system receiver (*e.g.*, the remaining portions of the appliance, or a specific vessel within the appliance) or a recovery or recycling

machine certified pursuant to § 82.158. A technician must verify that the applicable level of evacuation has been reached in the appliance or the part before it is opened.

(1) Persons opening appliances except for small appliances, MVACs, and MVAC-like appliances for maintenance, service, or repair must evacuate to the levels in table 1 before opening the appliance, unless

(i) Evacuation of the appliance to the atmosphere is not to be performed after completion of the maintenance, service, or repair, and the maintenance, service, or repair is not major as defined at § 82.152; or

(ii) Due to leaks in the appliance, evacuation to the levels in table 1 is not attainable, or would substantially contaminate the refrigerant being recovered; or

(iii) The recycling or recovery equipment was certified pursuant to § 82.158(b)(2). In any of these cases, the requirements of § 82.156(a)(2) must be followed.

(2)(i) If evacuation of the appliance to the atmosphere is not to be performed after completion of the maintenance, service, or repair, and if the maintenance, service, or repair is not major as defined at § 82.152, the appliance must:

(A) Be evacuated to a pressure no higher than 0 psig before it is opened if it is a high- or very high-pressure appliance;

(B) Be pressurized to a pressure no higher than 0 psig before it is opened if it is a low-pressure appliance. Persons must cover openings when isolation is not possible. Persons pressurizing low-pressure appliances that use refrigerants with boiling points at or below 85 degrees Fahrenheit at 29.9 inches of mercury (standard atmospheric pressure), (*e.g.* R–11 and R–123), must not use methods such as nitrogen, that require subsequent purging. Persons pressurizing low-pressure appliances that use refrigerants with boiling points above 85 degrees Fahrenheit at 29.9 inches of mercury, *e.g.*, R–113, must use heat to raise the internal pressure of the appliance as much as possible, but may use nitrogen to raise the internal pressure of the appliance from the level attainable through use of heat to atmospheric pressure; or

(C) For the purposes of oil changes, be evacuated or pressurized to a pressure no higher than 5 psig, before it is opened; or drain the oil into a system receiver to be evacuated or pressurized to a pressure no higher than 5 psig.

(ii) If, due to leaks in the appliance, evacuation to the levels in table 1 is not attainable, or would substantially contaminate the refrigerant being recovered, persons opening the appliance must:

(A) Isolate leaking from non-leaking components wherever possible;

(B) Evacuate non-leaking components to be opened to the levels specified in table 1; and

(C) Evacuate leaking components to be opened to the lowest level that can be attained without substantially contaminating the refrigerant. In no case shall this level exceed 0 psig.

(iii) If the recycling or recovery equipment was certified pursuant to § 82.158(b)(2), technicians must follow the manufacturer's directions for achieving the required recovery efficiency.

(3) Persons disposing of appliances except for small appliances, MVACs, and MVAC-like appliances, must evacuate to the levels in table 1 unless, due to leaks in the appliance, evacuation to the levels in table 1 is not attainable, or would substantially contaminate the refrigerant being recovered. If, due to leaks in the appliance, evacuation to the levels in table 1 is not attainable, or would substantially contaminate the refrigerant being recovered, persons disposing of the appliance must:

(i) Isolate leaking from non-leaking components wherever possible;

(ii) Evacuate non-leaking components to the levels specified in table 1; and

(iii) Evacuate leaking components to the lowest level that can be attained without substantially contaminating the refrigerant. In no case shall this level exceed 0 psig.

TABLE 1—REQUIRED LEVELS OF EVACUATION FOR APPLIANCES
[Except for small appliances, MVACs, and MVAC-like appliances]

Type of appliance	Inches of Hg vacuum (relative to standard atmospheric pressure of 29.9 inches Hg)	
	Using recovery or recycling equipment manufactured or imported before November 15, 1993	Using recovery or recycling equipment manufactured or imported on or after November 15, 1993
Very high-pressure appliance	0	0
High-pressure appliance, or isolated component of such appliance, normally containing less than 200 pounds of refrigerant.	0	0
High-pressure appliance, or isolated component of such appliance, normally containing 200 pounds or more of refrigerant.	4	10
Medium-pressure appliance, or isolated component of such appliance, normally containing less than 200 pounds of refrigerant.	4	10
Medium-pressure appliance, or isolated component of such appliance, normally containing 200 pounds or more of refrigerant.	4	15
Low-pressure appliance	25	25 mm Hg absolute

(4) Persons opening small appliances for maintenance, service, or repair must:

(i) When using recycling and recovery equipment manufactured before November 15, 1993, recover 80% of the refrigerant in the small appliance; or

(ii) When using recycling or recovery equipment manufactured on or after November 15, 1993, recover 90% of the refrigerant in the appliance when the compressor in the appliance is operating, or 80% of the refrigerant in the appliance when the compressor in the appliance is not operating; or

(iii) Evacuate the small appliance to four inches of mercury vacuum.

(5) Persons opening MVAC-like appliances for maintenance, service, or repair may do so only while properly using, as defined at § 82.32(e), recycling or recovery equipment certified pursuant to § 82.158 (f) or (g), as applicable.

(b) All persons opening appliances except for small appliances, MVACs, and MVAC-like appliances for maintenance, service, or repair and all persons disposing of appliances except small appliances, MVACs, and MVAC-like appliances must have at least one piece of certified, self-contained recovery or recycling equipment available at their place of business. Persons who maintain, service, repair, or dispose of only appliances that they own and that contain pump-out units are exempt from this requirement. This exemption does not relieve such persons from other applicable requirements of this section.

(c) System-dependent equipment shall not be used with appliances normally containing more than 15 pounds of refrigerant, unless the system-dependent equipment is permanently attached to the appliance as a pump-out unit.

(d) All recovery or recycling equipment shall be used in accordance with the manufacturer's directions unless such directions conflict with the requirements of this subpart.

(e) Refrigerant may be returned to the appliance from which it is recovered or to another appliance owned by the same person without being recycled or reclaimed, unless the appliance is an MVAC or MVAC-like appliance.

(f) Effective July 13, 1993, persons who take the final step in the disposal process (including but not limited to scrap recyclers and landfill operators) of a small appliance, room air conditioning, MVACs, or MVAC-like appliances must either:

(1) Recover any remaining refrigerant from the appliance in accordance with paragraph (g) or (h) of this section, as applicable; or

(2) Verify that the refrigerant has been evacuated from the appliance or shipment of appliances previously. Such verification must include a signed statement from the person from

whom the appliance or shipment of appliances is obtained that all refrigerant that had not leaked previously has been recovered from the appliance or shipment of appliances in accordance with paragraph (g) or (h) of this section, as applicable. This statement must include the name and address of the person who recovered the refrigerant and the date the refrigerant was recovered or a contract that refrigerant will be removed prior to delivery.

(3) Persons complying with paragraph (f)(2) of this section must notify suppliers of appliances that refrigerant must be properly removed before delivery of the items to the facility. The form of this notification may be warning signs, letters to suppliers, or other equivalent means.

(g) All persons recovering refrigerant from MVACs and MVAC-like appliances for purposes of disposal of these appliances must reduce the system pressure to or below 102 mm of mercury vacuum, using equipment that meets the standards set forth in § 82.158(l).

(h) All persons recovering the refrigerant from small appliances for purposes of disposal of these appliances must either:

(1) Recover 90% of the refrigerant in the appliance when the compressor in the appliance is operating, or 80% of the refrigerant in the appliance when the compressor in the appliance is not operating; or

(2) Evacuate the small appliance to four inches of mercury vacuum.

(i)(1) Owners or operators of commercial refrigeration equipment normally containing more than 50 pounds of refrigerant must have leaks repaired in accordance with paragraph (i)(9) of this section, if the appliance is leaking at a rate such that the loss of refrigerant will exceed 35 percent of the total charge during a 12-month period, except as described in paragraphs (i)(6), (i)(8), and (i)(10) of this section and paragraphs (i)(1)(i), (i)(1)(ii), and (i)(1)(iii) of this section. Repairs must bring the annual leak rate to below 35 percent.

(i) If the owners or operators of the federally-owned commercial refrigerant appliances determine that the leaks cannot be repaired in accordance with paragraph (i)(9) of this section and that an extension in accordance with the requirements discussed in this paragraph (i)(1)(i) of this section apply, they must document all repair efforts, and notify EPA of their inability to comply within the 30-day repair requirement, and the reason for the inability must be submitted to EPA in accordance with § 82.166(n). Such notification must be made within 30 days of discovering the leaks. EPA will determine if the extension requested in accordance with the requirements discussed in paragraph (i)(1)(i) of this section is justified. If the extension is not justified, EPA will notify the owner/operator within 30 days of receipt of the notification.

(ii) Owners or operators of federally-owned commercial refrigeration equipment may have more than 30 days to repair leaks if the refrigeration appliance is located in an area subject to radiological contamination or where the shutting down of the appliance will directly lead to radiological contamination. Only the additional time needed to conduct and complete repairs in a safe working environment will be permitted.

(iii) Owners or operators of federally-owned commercial refrigeration equipment requesting or who are granted time extensions under this paragraph must comply with paragraphs (i)(3) and (i)(4) of this section.

(2) The owners or operators of industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant must have leaks repaired if the appliance is leaking at a rate such that the loss of refrigerant will exceed 35 percent of the total charge during a 12-month period in accordance with paragraph (i)(9) of this section, except as described in paragraphs (i)(6), (i)(7) and (i)(10) of this section, and paragraphs (i)(2)(i) and (i)(2)(ii) of this section. Repairs must bring annual leak rates to below 35 percent during a 12-month period. If the owners or operators of the industrial process refrigeration equipment determine that the leak rate cannot be brought to below 35 percent during a 12-month period within 30 days (or 120 days, where an industrial process shutdown in accordance with paragraph (i)(2)(ii) of this section is required,) and

in accordance with paragraph (i)(9) of this section, and that an extension in accordance with the requirements discussed in this paragraph apply, the owners or operators of the appliance must document all repair efforts, and notify EPA of the reason for the inability in accordance with § 82.166(n) within 30 days of making this determination. Owners or operators who obtain an extension pursuant to this section or elect to utilize the additional time provided in paragraph (i)(2)(i) of this section, must conduct all necessary leak repairs, if any, that do not require any additional time beyond the initial 30 or 120 days.

(i) The owners or operators of industrial process refrigeration equipment are permitted more than 30 days (or 120 days where an industrial process shutdown in accordance with paragraph (i)(2)(ii) of this section is required) to repair leaks, if the necessary parts are unavailable or if requirements of other applicable federal, state, or local regulations make a repair within 30 or 120 days impossible. Only the additional time needed to receive delivery of the necessary parts or to comply with the pertinent regulations will be permitted.

(ii) Owners or operators of industrial process refrigeration equipment will have a 120-day repair period, rather than a 30-day repair period, to repair leaks in instances where an industrial process shutdown is needed to repair a leak or leaks from industrial process refrigeration equipment.

(3) Owners or operators of industrial process refrigeration equipment and owners or operators of federally-owned commercial refrigeration equipment or of federally-owned comfort cooling appliances who are granted additional time under paragraphs (i)(1) or (i)(5) of this section, must have repairs performed in a manner that sound professional judgment indicates will bring the leak rate below the applicable allowable leak rate. When an industrial process shutdown has occurred or when repairs have been made while an appliance is mothballed, the owners or operators shall conduct an initial verification test at the conclusion of the repairs and a follow-up verification test. The follow-up verification test shall be conducted within 30 days of completing the repairs or within 30 days of bringing the appliance back on-line, if taken off-line, but no sooner than when the appliance has achieved normal operating characteristics and conditions. When repairs have been conducted without an industrial process shutdown or system mothballing, an initial verification test shall be conducted at the conclusion of the repairs, and a follow-up verification test shall be conducted within 30 days of the initial verification test. In all cases, the follow-up verification test shall be conducted at normal operating characteristics and conditions, unless sound professional judgment indicates that tests performed at normal operating characteristics and conditions will produce less reliable results, in which case the follow-up verification test shall be conducted at or near the normal operating pressure where practicable, and at or near the normal operating temperature where practicable.

(i) If the owners or operators of industrial process refrigeration equipment takes the appliance off-line, or if the owners or operators of federally-owned commercial refrigeration or of federally-owned comfort cooling appliances who are granted additional time under paragraphs (i)(1) or (i)(5) of this section take the appliance off-line, they cannot bring the appliance back on-line until an initial verification test indicates that the repairs undertaken in accordance with paragraphs (i)(1)(i), (ii), (iii), or (i)(2)(i) and (ii), or (5)(i), (ii), and (iii) of this section have been successfully completed, demonstrating the leak or leaks are repaired. The owners or operators of the industrial process refrigeration equipment, federally-owned commercial refrigeration appliances, or federally-owned comfort cooling appliances are exempted from this requirement only where the owners or operators will retrofit or retire the industrial process refrigeration equipment, federally-owned commercial refrigeration appliance, or federally-owned comfort cooling appliance in accordance with paragraph (i)(6) of this section. Under this exemption, the

owner or operators may bring the industrial process refrigeration equipment, federally-owned commercial refrigeration appliance, or federally-owned comfort cooling appliance back on-line without successful completion of an initial verification test.

(ii) If the follow-up verification test indicates that the repairs to industrial process refrigeration equipment, federally-owned commercial refrigeration equipment, or federally-owned comfort cooling appliances have not been successful, the owner or operator must retrofit or retire the equipment in accordance with paragraph (i)(6) and any such longer time period as may apply under paragraphs (i)(7)(i), (ii) and (iii) or (i)(8)(i) and (ii) of this section. The owners and operators of the industrial process refrigeration equipment, federally-owned commercial refrigeration equipment, or federally-owned comfort cooling appliances are relieved of this requirement if the conditions of paragraphs (i)(3)(iv) and/or (i)(3)(v) of this section are met.

(iii) The owner or operator of industrial process refrigeration equipment that fails a follow-up verification test must notify EPA within 30 days of the failed follow-up verification test in accordance with § 82.166(n).

(iv) The owner or operator is relieved of the obligation to retrofit or replace the industrial process refrigeration equipment as discussed in paragraph (i)(6) of this section if second repair efforts to fix the same leaks that were the subject of the first repair efforts are successfully completed within 30 days or 120 days where an industrial process shutdown is required, after the initial failed follow-up verification test. The second repair efforts are subject to the same verification requirements of paragraphs (i)(3), (i)(3) (i) and (ii) of this section. The owner or operator is required to notify EPA within 30 days of the successful follow-up verification test in accordance with § 82.166(n) and the owner or operator is no longer subject to the obligation to retrofit or replace the appliance that arose as a consequence of the initial failure to verify that the leak repair efforts were successful.

(v) The owner or operator of industrial process refrigeration equipment is relieved of the obligation to retrofit or replace the equipment in accordance with paragraph (i)(6) of this section if within 180 days of the initial failed follow-up verification test, the owner or operator establishes that the appliance's annual leak rate does not exceed the applicable allowable annual leak rate, in accordance with paragraph (i)(4) of this section. If the appliance's owner or operator establishes that the appliance's annual leak rate does not exceed the applicable allowable annual leak rate, the owner or operator is required to notify EPA within 30 days of that determination in accordance with § 82.166(n) and the owner or operator would no longer be subject to the obligation to retrofit or replace the equipment that arose as a consequence of the initial failure to verify that the leak repair efforts were successful.

(4) In the case of a failed follow-up verification test subject to paragraph (i)(3)(v) of this section, the determination of whether industrial process refrigeration equipment has an annual leak rate that exceeds the applicable allowable annual leak rate will be made in accordance with parameters identified by the owner or operator in its notice to EPA regarding the failure of the initial follow-up verification test, if those parameters are acceptable to EPA; otherwise by parameters selected by EPA. The determination must be based on the full charge for the affected industrial process refrigeration equipment. The leak rate determination parameters in the owner's or operator's notice will be considered acceptable unless EPA notifies the owners or operators within 30 days of receipt of the notice. Where EPA does not accept the parameters identified by the owner or operator in its notice, EPA will not provide additional time beyond the additional time permitted in paragraph (i)(3)(v) of this section unless specifically stated in the parameters selected by EPA.

(5) Owners or operators of comfort cooling appliances normally containing more than 50 pounds of refrigerant and not covered by paragraph (i)(1) or (i)(2) of this section must have leaks repaired in accordance with paragraph (i)(9) of this section if the appliance is leaking at a rate such that the loss of

refrigerant will exceed 15 percent of the total charge during a 12-month period, except as described in paragraphs (i)(6), (i)(8) and (i)(10) of this section and paragraphs (i)(5)(i), (i)(5)(ii) and (i)(5)(iii) of this section. Repairs must bring the annual leak rate to below 15 percent.

(i) If the owners or operators of federally-owned comfort-cooling appliances determine that the leaks cannot be repaired in accordance with paragraph (i)(9) of this section and that an extension in accordance with the requirements discussed in paragraph (i)(5) of this section apply, they must document all repair efforts, and notify EPA of their inability to comply within the 30-day repair requirement, and the reason for the inability must be submitted to EPA in accordance with § 82.166(n). Such notification must be made within 30 days of discovering that leak repair efforts cannot be completed within 30 days.

(ii) Owners or operators of federally-owned comfort-cooling appliances may have more than 30 days to repair leaks where the refrigeration appliance is located in an area subject to radiological contamination or where the shutting down of the appliance will directly lead to radiological contamination. Only the additional time needed to conduct and complete work in a safe environment will be permitted.

(iii) Owners or operators of federally-owned comfort-cooling appliances requesting, or who are granted, time extensions under this paragraph must comply with paragraphs (i)(3) and (i)(4) of this section.

(6) Owners or operators are not required to repair leaks as provided in paragraphs (i)(1), (i)(2), and (i)(5) of this section if, within 30 days of discovering a leak greater than the applicable allowable leak rate, or within 30 days of a failed follow-up verification test, or after making good faith efforts to repair the leaks as described in paragraph (i)(6)(i) of this section, they develop a one-year retrofit or retirement plan for the leaking appliance. Owners or operators who decide to retrofit the appliance must use a refrigerant or substitute with a lower or equivalent ozone-depleting potential than the previous refrigerant and must include such a change in the retrofit plan. Owners or operators who retire and replace the appliance must replace the appliance with an appliance that uses a refrigerant or substitute with a lower or equivalent ozone-depleting potential and must include such a change in the retirement plan. The retrofit or retirement plan (or a legible copy) must be kept at the site of the appliance. The original plan must be made available for EPA inspection upon request. The plan must be dated, and all work performed in accordance with the plan must be completed within one year of the plan's date, except as described in paragraphs (i)(6)(i), (i)(7), and (i)(8) of this section. Owners or operators are temporarily relieved of this obligation if the appliance has undergone system mothballing as defined in § 82.152.

(i) If the owner or operator has made good faith efforts to repair leaks from the appliance in accordance with paragraphs (i)(1), (i)(2), or (i)(5) of this section and has decided prior to completing a follow-up verification test, to retrofit or retire the appliance in accordance with paragraph (i)(6) of this section, the owner or operator must develop a retrofit or retirement plan within 30 days of the decision to retrofit or retire the appliance. The owner or operator must complete the retrofit or retirement of the appliance within one year and 30 days of when the owner or operator discovered that the leak rate exceeded the applicable allowable leak rate, except as provided in paragraphs (i)(7) and (i)(8) of this section.

(ii) In all cases, subject to paragraph (i)(6)(i) of this section, the written plan shall be prepared no later than 30 days after the owner or operator has determined to proceed with retrofitting or retiring the appliance. All reports required under § 82.166(o) shall be due at the time specified in the paragraph imposing the specific reporting requirement, or no later than 30 days after the decision to retrofit or retire the appliance, whichever is later.

(iii) In cases where the owner or operator of industrial process refrigeration equipment has made good faith efforts to retrofit or retire industrial process refrigeration equipment prior to August 8, 1995, and where these efforts are not complete, the owner or operator

must develop a retrofit or retirement plan that will complete the retrofit or retirement of the affected appliance by August 8, 1996. This plan (or a legible copy) must be kept at the site of the appliance. The original must be made available for EPA inspection upon request. Where the conditions of paragraphs (i)(7) and (i)(8) of this section apply, and where the length of time necessary to complete the work is beyond August 8, 1996, all records must be submitted to EPA in accordance with § 82.166(o), as well as maintained on-site.

(7) The owners or operators of industrial process refrigeration equipment will be allowed additional time to complete the retrofit or retirement of industrial process refrigeration equipment if the conditions described in paragraphs (i)(7)(i) or (i)(7)(ii) of this section are met. The owners or operators of industrial process refrigeration equipment will be allowed additional time beyond the additional time provided in paragraph (i)(7)(ii) of this section if the conditions described in paragraph (i)(7)(iii) of this section are met.

(i) Additional time, to the extent reasonably necessary will be allowed for retrofitting or retiring industrial process refrigeration equipment due to delays occasioned by the requirements of other applicable federal, state, or local laws or regulations, or due to the unavailability of a suitable replacement refrigerant with a lower ozone depletion potential. If these circumstances apply, the owner or operator of the facility must notify EPA within six months after the 30-day period following the discovery of an exceedance of the 35 percent leak rate. Records necessary to allow EPA to determine that these provisions apply and the length of time necessary to complete the work must be submitted to EPA in accordance with § 82.166(o), as well as maintained on-site. EPA will notify the owner or operator of its determination within 60 days of receipt the submittal.

(ii) An additional one-year period beyond the initial one-year retrofit period is allowed for industrial process refrigeration equipment where the following criteria are met:

(A) The new or the retrofitted industrial process refrigerant equipment is custom-built;

(B) The supplier of the appliance or one or more of its critical components has quoted a delivery time of more than 30 weeks from when the order is placed;

(C) The owner or operator notifies EPA within six months of the expiration of the 30-day period following the discovery of an exceedance of the 35 percent leak rate to identify the owner or operator, describe the appliance involved, explain why more than one year is needed, and demonstrate that the first two criteria are met in accordance with § 82.166(o); and

(D) The owner or operator maintains records that are adequate to allow a determination that the criteria are met.

(iii) The owners or operators of industrial process refrigeration equipment may request additional time to complete retrofitting or retiring industrial process refrigeration equipment beyond the additional one-year period if needed and where the initial additional one year was granted in accordance with paragraph (i)(7)(ii) of this section. The request shall be submitted to EPA before the end of the ninth month of the first additional year and shall include revisions of information required under § 82.166(o). Unless EPA objects to this request submitted in accordance with § 82.166(o) within 30 days of receipt, it shall be deemed approved.

(8) Owners or operators of federally-owned commercial or comfort-cooling appliances will be allowed an additional year to complete the retrofit or retirement of the appliances if the conditions described in paragraph (i)(8)(i) of this section are met, and will be allowed one year beyond the additional year if the conditions in paragraph (i)(8)(ii) of this section are met.

(i) Up to one additional one-year period beyond the initial one-year retrofit period is allowed for such equipment where the following criteria are met:

(A) Due to complications presented by the federal agency appropriations and/or procurement process, a delivery time of more than 30 weeks from the beginning of the official procurement

process is quoted, or where the appliance is located in an area subject to radiological contamination and creating a safe working environment will require more than 30 weeks;

(B) The operator notifies EPA within six months of the expiration of the 30-day period following the discovery of an exceedance of the applicable allowable annual leak rate to identify the operator, describe the appliance involved, explain why more than one year is needed, and demonstrate that the first criterion is met in accordance with §82.166(o); and

(C) The operator maintains records adequate to allow a determination that the criteria are met.

(ii) The owners or operators of federally-owned commercial or comfort-cooling appliances may request additional time to complete retrofitting, replacement or retiring such appliances beyond the additional one-year period if needed and where the initial additional one year was granted in accordance with paragraph (i)(8)(i) of this section. The request shall be submitted to EPA before the end of the ninth month of the first additional year and shall include revisions of information earlier submitted as required under §82.166(o). Unless EPA objects to this request submitted in accordance with §82.166(o) within 30 days of receipt, it shall be deemed approved.

(9) Owners or operators must repair leaks pursuant to paragraphs (i)(1), (i)(2) and (i)(5) of this section within 30 days after discovery, or within 30 days after when the leaks should have been discovered if the owners intentionally shielded themselves from information which would have revealed a leak, unless granted additional time pursuant to §82.156(i).

(10) The amount of time for owners and operators to complete repairs, retrofit plans or retrofits/replacements/retirements under paragraphs (i)(1), (i)(2), (i)(5), (i)(6), (i)(7), (i)(8), and (i)(9) of this section is temporarily suspended at the time an appliance is mothballed as defined in §82.152. The time for owners and operators to complete repairs, retrofit plans, or retrofits/replacements will resume on the day the appliance is brought back online and is no longer considered mothballed. All initial and follow-up verification tests must be performed in accordance with paragraphs (i)(3), (i)(3)(i), and (i)(3)(ii) of this section.

(11) In calculating annual leak rates, purged refrigerant that is destroyed at a verifiable destruction efficiency of 98 percent or greater will not be counted toward the leak rate. Owners or operators destroying purged refrigerants must maintain information as set forth in §82.166(p)(1) and submit to EPA, within 60 days after the first time such exclusion is used by that facility, information set forth in §82.166(p)(2).

[58 FR 28712, May 14, 1993, as amended at 59 FR 42956, 42962, Aug. 19, 1994; 59 FR 55926, Nov. 9, 1994; 60 FR 40440, Aug. 8, 1995; 68 FR 43807, July 24, 2003; 69 FR 11979, Mar. 12, 2004; 70 FR 1991, Jan. 11, 2005]

§82.158 Standards for recycling and recovery equipment.

(a) Effective September 22, 2003, all manufacturers and importers of recycling and recovery equipment intended for use during the maintenance, service, or repair of appliances except MVACs and MVAC-like appliances or during the disposal of appliances except small appliances, MVACs, and MVAC-like appliances, shall have had such equipment certified by an approved equipment testing organization to meet the applicable requirements in paragraph (b)(1), (b)(2), or (d) of this section. All manufacturers and importers of recycling and recovery equipment intended for use during the maintenance, service, or repair of MVAC-like appliances shall have had such equipment certified pursuant to §82.36(a).

(b) Equipment manufactured or imported on or after November 15, 1993 and before September 22, 2003, for use during the maintenance, service, or repair of appliances except small appliances, MVACs, and MVAC-like appliances or during the disposal of appliances except small appliances, MVACs, and MVAC-like appliances must be certified by an approved equipment testing organization to meet the requirements of paragraph (b)(1) of this section and the following requirements below. Equipment manufactured or imported on or after September 22, 2003,

but not limited to oils and fats derived from plant seeds, nuts, fruits, and kernels.

Vessel means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water, other than a public vessel.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds.

Worst case discharge for an onshore non-transportation-related facility means the largest foreseeable discharge in adverse weather conditions as determined using the worksheets in Appendix D to this part.

§ 112.3 Requirement to prepare and implement a Spill Prevention, Control, and Countermeasure Plan.

The owner or operator of an onshore or offshore facility subject to this section must prepare a Spill Prevention, Control, and Countermeasure Plan (hereafter ''SPCC Plan'' or ''Plan),'' in writing, and in accordance with §112.7, and any other applicable section of this part.

(a) If your onshore or offshore facility was in operation on or before August 16, 2002, you must maintain your Plan, but must amend it, if necessary to ensure compliance with this part, by October 31, 2007, and implement the Plan no later than October 31, 2007. If your onshore or offshore facility becomes operational after August 16, 2002, through October 31, 2007, and could reasonably be expected to have a discharge as described in §112.1(b), you must prepare and implement a Plan on or before October 31, 2007.

(b) If you are the owner or operator of an onshore or offshore facility that becomes operational after October 31, 2007, and could reasonably be expected to have a discharge as described in §112.1(b), you must prepare and implement a Plan before you begin operations.

(c) If you are the owner or operator of an onshore or offshore mobile facility, such as an onshore drilling or workover rig, barge mounted offshore drilling or workover rig, or portable fueling facility, you must prepare, implement, and maintain a facility Plan as required by this section. You must maintain your Plan, but must amend and implement it, if necessary to ensure compliance with this part, on or before October 31, 2007. If your onshore or offshore mobile facility becomes operational after October 31, 2007, and could reasonably be expected to have a discharge as described in §112.1(b), you must prepare and implement a Plan before you begin operations. This provision does not require that you prepare a new Plan each time you move the facility to a new site. The Plan may be a general Plan. When you move the mobile or portable facility, you must locate and install it using the discharge prevention practices outlined in the Plan for the facility. The Plan is applicable only while the facility is in a fixed (non-transportation) operating mode.

(d) A licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements of this part.

(1) By means of this certification the Professional Engineer attests:

(i) That he is familiar with the requirements of this part ;

(ii) That he or his agent has visited and examined the facility;

(iii) That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;

(iv) That procedures for required inspections and testing have been established; and

(v) That the Plan is adequate for the facility.

(2) Such certification shall in no way relieve the owner or operator of a facility of his duty to prepare and fully implement such Plan in accordance with the requirements of this part.

(e) If you are the owner or operator of a facility for which a Plan is required under this section, you must:

(1) Maintain a complete copy of the Plan at the facility if the facility is normally attended at least four hours per day, or at the nearest field office if the facility is not so attended, and

(2) Have the Plan available to the Regional Administrator for on-site review during normal working hours.

(f) *Extension of time.* (1) The Regional Administrator may authorize an extension of time for the preparation and full implementation of a Plan, or any amendment thereto, beyond the time permitted for the preparation, implementation, or amendment of a Plan under this part, when he finds that the owner or operator of a facility subject to this section, cannot fully comply with the requirements as a result of either nonavailability of qualified personnel, or delays in construction or equipment delivery beyond the control and without the fault of such owner or operator or his agents or employees.

(2) If you are an owner or operator seeking an extension of time under paragraph (f)(1) of this section, you may submit a written extension request to the Regional Administrator. Your request must include:

(i) A full explanation of the cause for any such delay and the specific aspects of the Plan affected by the delay;

(ii) A full discussion of actions being taken or contemplated to minimize or mitigate such delay; and

(iii) A proposed time schedule for the implementation of any corrective actions being taken or contemplated, including interim dates for completion of tests or studies, installation and operation of any necessary equipment, or other preventive measures. In addition you may present additional oral or written statements in support of your extension request.

(3) The submission of a written extension request under paragraph (f)(2) of this section does not relieve you of your obligation to comply with the requirements of this part. The Regional Administrator may request a copy of your Plan to evaluate the extension request. When the Regional Administrator authorizes an extension of time for particular equipment or other specific aspects of the Plan, such extension does not affect your obligation to comply with the requirements related to other equipment or other specific aspects of the Plan for which the Regional Administrator has not expressly authorized an extension.

[67 FR 47140, July 17, 2002, as amended at 68 FR 1351, Jan. 9, 2003; 68 FR 18894, Apr. 17, 2003; 69 FR 48798, Aug. 11, 2004; 71 FR 8466, Feb. 17, 2006]

§ 112.4 Amendment of Spill Prevention, Control, and Countermeasure Plan by Regional Administrator.

If you are the owner or operator of a facility subject to this part, you must:

(a) Notwithstanding compliance with § 112.3, whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in § 112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in § 112.1(b), occurring within any twelve month period, submit the following information to the Regional Administrator within 60 days from the time the facility becomes subject to this section:

(1) Name of the facility;

(2) Your name;

(3) Location of the facility;

(4) Maximum storage or handling capacity of the facility and normal daily throughput;

(5) Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;

(6) An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;

(7) The cause of such discharge as described in § 112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;

(8) Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and

(9) Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.

(b) Take no action under this section until it applies to your facility. This section does not apply until the expiration of the time permitted for the initial preparation and implementation of the Plan under § 112.3, but not including any amendments to the Plan.

16, 2002, five years from the date your last review was required under this part. As a result of this review and evaluation, you must amend your SPCC Plan within six months of the review to include more effective prevention and control technology if the technology has been field-proven at the time of the review and will significantly reduce the likelihood of a discharge as described in §112.1(b) from the facility. You must implement any amendment as soon as possible, but not later than six months following preparation of any amendment. You must document your completion of the review and evaluation, and must sign a statement as to whether you will amend the Plan, either at the beginning or end of the Plan or in a log or an appendix to the Plan. The following words will suffice, ''I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result.''

(c) Have a Professional Engineer certify any technical amendment to your Plan in accordance with §112.3(d).

§ 112.6 [Reserved]

§ 112.7 General requirements for Spill Prevention, Control, and Countermeasure Plans.

If you are the owner or operator of a facility subject to this part you must prepare a Plan in accordance with good engineering practices. The Plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the Plan. You must prepare the Plan in writing. If you do not follow the sequence specified in this section for the Plan, you must prepare an equivalent Plan acceptable to the Regional Administrator that meets all of the applicable requirements listed in this part, and you must supplement it with a section cross-referencing the location of requirements listed in this part and the equivalent requirements in the other prevention plan. If the Plan calls for additional facilities or procedures, methods, or equipment not yet fully operational, you must discuss these items in separate paragraphs, and must explain separately the details of installation and operational start-up. As detailed elsewhere in this section, you must also:

(a)(1) Include a discussion of your facility's conformance with the requirements listed in this part.

(2) Comply with all applicable requirements listed in this part. Your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2),112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11),112.13(c)(2), and 112.14(c), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in §112.4(d) and (e).

(3) Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each container. The facility diagram must include completely buried tanks that are otherwise exempted from the requirements of this part under §112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes. You must also address in your Plan:

(i) The type of oil in each container and its storage capacity;

(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);

(iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge;

(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);

(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and

(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of a discharge as described in §112.1(b).

(4) Unless you have submitted a response plan under §112.20, provide information and procedures in your Plan to enable a person reporting a discharge as described in §112.1(b) to relate information on the exact address or location and phone number of the facility; the date and time of the discharge, the type of material discharged; estimates of the total quantity discharged; estimates of the quantity discharged as described in §112.1(b); the source of the discharge; a description of all affected media; the cause of the discharge; any damages or injuries caused by the discharge; actions being used to stop, remove, and mitigate the effects of the discharge; whether an evacuation may be needed; and, the names of individuals and/or organizations who have also been contacted.

(5) Unless you have submitted a response plan under §112.20, organize portions of the Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency, and include appropriate supporting material as appendices.

(b) Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.

(c) Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in §112.1(b). The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank or pipe, will not escape the containment system before cleanup occurs. At a minimum, you must use one of the following prevention systems or its equivalent:

(1) For onshore facilities:

(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;

(ii) Curbing;

(iii) Culverting, gutters, or other drainage systems;

(iv) Weirs, booms, or other barriers;

(v) Spill diversion ponds;

(vi) Retention ponds; or

(vii) Sorbent materials.

(2) For offshore facilities:

(i) Curbing or drip pans; or

(ii) Sumps and collection systems.

(d) If you determine that the installation of any of the structures or pieces of equipment listed in paragraphs (c) and (h)(1) of this section, and §§112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2), and 112.14(c) to prevent a discharge as described in §112.1(b) from any onshore or offshore facility is not practicable, you must clearly explain in your Plan why such measures are not practicable; for bulk storage containers, conduct both periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping; and, unless you have submitted a response plan under §112.20, provide in your Plan the following:

(1) An oil spill contingency plan following the provisions of part 109 of this chapter.

(2) A written commitment of manpower, equipment, and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

(e) *Inspections, tests, and records.* Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer develop for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.

(f) *Personnel, training, and discharge prevention procedures.* (1) At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rules, and regulations; general facility operations; and, the contents of the facility SPCC Plan.

(2) Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.

(3) Schedule and conduct discharge prevention briefings for your oil-handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in §112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.

(g) *Security (excluding oil production facilities).* (1) Fully fence each facility handling, processing, or storing oil, and lock and/or guard entrance gates when the facility is not in production or is unattended.

(2) Ensure that the master flow and drain valves and any other valves permitting direct outward flow of the container's contents to the surface have adequate security measures so that they remain in the closed position when in non-operating or non-standby status.

(3) Lock the starter control on each oil pump in the ''off'' position and locate it at a site accessible only to authorized personnel when the pump is in a non-operating or non-standby status.

(4) Securely cap or blank-flange the loading/unloading connections of oil pipelines or facility piping when not in service or when in standby service for an extended time. This security practice also applies to piping that is emptied of liquid content either by draining or by inert gas pressure.

(5) Provide facility lighting commensurate with the type and location of the facility that will assist in the:

(i) Discovery of discharges occurring during hours of darkness, both by operating personnel, if present, and by non-operating personnel (the general public, local police, etc.); and

(ii) Prevention of discharges occurring through acts of vandalism.

(h) *Facility tank car and tank truck loading/unloading rack (excluding offshore facilities).* (1) Where loading/unloading area drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading and unloading areas. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.

(2) Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.

(3) Prior to filling and departure of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.

(i) If a field-constructed aboveground container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.

(j) In addition to the minimal prevention standards listed under this section, include in your Plan a complete

discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.

Subpart B—Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)

SOURCE: 67 FR 47146, July 17, 2002, unless otherwise noted.

§ 112.8 Spill Prevention, Control, and Countermeasure Plan requirements for onshore facilities (excluding production facilities).

If you are the owner or operator of an onshore facility (excluding a production facility), you must:

(a) Meet the general requirements for the Plan listed under §112.7, and the specific discharge prevention and containment procedures listed in this section.

(b) *Facility drainage.* (1) Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.

(2) Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.

(3) Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.

(4) If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge, retain oil in the facility.

(5) Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two ''lift'' pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in §112.1(b) in case there is an equipment failure or human error at the facility.

(c) *Bulk storage containers.* (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.

(2) Construct all bulk storage container installations so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.

(3) Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:

(i) Normally keep the bypass valve sealed closed.

(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in §112.1(b).

IV Pennsylvania-Specific Rules

The following citations were used to support the findings based on Pennsylvania-specific regulations. The citations are listed in numeric order.

(b) A tank system shall be emptied and regulated substances and contents shall be reused, treated or disposed of in accordance with State and Federal requirements.

(c) A tank shall be secured against unauthorized entry and all piping entering or existing the tank, excluding vents, shall be capped or blinded.

(d) Tank integrity shall be maintained throughout the temporary removal-from-service time and the tank shall be protected against flotation.

(e) Inspection requirements shall be maintained as specified in §§ 245.551—245.554 (relating to aboveground storage tank inspections).

(f) Tanks which are temporarily removed-from-service for 5 years or longer shall meet the requirements for permanent closure.

Subchapter G. SIMPLIFIED PROGRAM FOR SMALL ABOVEGROUND STORAGE TANKS

GENERAL

Sec.

TECHNICAL REQUIREMENTS

Sec.

Source

The provisions of this Subchapter G adopted October 10, 1997, effective October 11, 1997, 27 Pa.B. 5341, unless otherwise noted.

Cross References

This subchapter cited in 25 Pa. Code § 245.212 (relating to minimum requirements for obtaining a permit-by-rule); 25 Pa. Code § 245.232 (relating to general requirements); and 25 Pa. Code § 245.502 (relating to scope).

GENERAL

§ 245.601. Purpose.

This subchapter establishes a simplified program of technical standards and requirements for small aboveground storage tanks not exceeding 21,000 gallons capacity and regulated under the act. Regulated aboveground storage tanks are defined in § 245.1 (relating to definitions).

§ 245.602. Scope.

The standards and requirements established in this subchapter shall be applied through the use of appropriate current codes of practice developed by Nationally recognized associations such as, but not limited to, those referenced in § 245.604 (relating to referenced organizations) and through the use of manufacturer's specifications and sound engineering practices. This subchapter is not intended to supersede other State and Federal regulations or jurisdictional requirements when they are more restrictive than the requirements in this part. For certain types of tanks this subchapter may make reference to the requirements for aboveground storage tanks in Subchapter F (relating to technical standards for aboveground storage tanks and facilities).

§ 245.603. General storage tank facility requirements.

(a) The owner/operator of aboveground storage tank facilities with an aggregate aboveground storage capacity greater than 21,000 gallons shall develop and adhere to a Spill Prevention Response Plan (Plan) which addresses the requirements described in Chapter 9 of the act (35 P. S. §§ 6021.901—6021.904). The Plan shall be provided to the Department and updated as necessary. A current copy of the Plan shall be readily available at the storage tank facility at all times.

(b) The owner/operator of aboveground storage tank facilities is responsible to assure that appropriate security measures and procedures based on the facility location are established and implemented to protect the environment and the public. These security measures may include, but are not limited to, fencing, lighting, access control, locked entrances and securing of valves, drains and dispensers.

§ 245.604. Referenced organizations.

(a) Nationally recognized associations which are referenced throughout this subchapter are as follows:

(1) American National Standards Institute (ANSI).
(2) American Petroleum Institute (API).
(3) American Society of Mechanical Engineers (ASME).
(4) American Society for Testing and Materials (ASTM).
(5) National Association of Corrosion Engineers (NACE).
(6) National Fire Protection Association (NFPA).
(7) Petroleum Equipment Institute (PEI).

(234768) No. 277 Dec. 97

(8) Steel Structures Painting Council (SSPC).
(9) Steel Tank Institute (STI).
(10) Underwriters Laboratory (UL).

(b) Nationally recognized codes and standards shall be used in conjunction with manufacturer's specifications to comply with this subchapter. When used to meet the technical standards and requirements of this subchapter, the most current or latest edition of the codes and standards shall be applied. Other Nationally recognized codes and standards, not referenced in this part, may also be used to comply with this subchapter, when appropriate.

(c) When Nationally recognized codes and standards are updated, facilities or storage tank systems installed to previously existing standards prior to the update will not automatically be required to be upgraded to meet the new standard.

Cross References

This section cited in 25 Pa. Code § 245.602 (relating to scope).

TECHNICAL REQUIREMENTS

§ 245.611. Testing requirements for new and substantially modified small aboveground storage tanks.

(a) Tanks installed after October 11, 1997, shall be tested for tightness in accordance with current codes of practice developed by Nationally recognized associations and manufacturer's specifications, except for manufactured, shop built tanks that meet the requirements of subsection (b). The testing shall be completed, as part of the installation process, prior to putting the tank in service.

(b) Manufactured, shop built tanks that are initially tested after full assembly at the plant do not require additional testing at installation if the manufacturer certifies that the tank was tested at the plant and the manufacturer's installation instructions do not specify additional testing.

(c) Tanks that receive major modifications to the tank shell or the tank bottom shall be tested for tightness, in accordance with current codes of practice developed by Nationally recognized associations or manufacturer's specifications, prior to being returned to service.

§ 245.612. Performance and design standards.

(a) Tanks shall be designed, constructed and installed or modified in accordance with current codes of practice developed by Nationally recognized associations such as API, ASME, ASTM, ANSI, STI and UL and the manufacturer's specifications.

(b) Tanks shall have a stable support or foundation capable of adequately supporting the total weight of the tank and its contents when in use. The support or foundation shall meet or exceed the specifications of the tank manufacturer and be designed and constructed in accordance with sound engineering practices.

material is no longer a waste in accordance with § 287.7 (relating to determination that a material is no longer a waste).

(c) *Recordkeeping*. The generator is required to maintain, for 3 years, the following records:

(1) The type of oil used.

(2) A description of the process that generates the waste oil.

(3) A record of the tests used to determine if the waste oil contains more than 1,000 parts per million total halogens.

(4) A record of the information used to rebut the presumption in § 298.10(b)(1)(ii) if the waste oil contains more than 1,000 parts per million total halogens.

(5) The type and quantity of any hazardous waste generated and the analyses of hazardous waste characteristics for any mixtures of hazardous waste with waste oil.

§ 298.21. Hazardous waste mixing.

(a) A mixture of waste oil and hazardous waste shall be managed in accordance with § 298.10(b) (relating to applicability).

(b) The rebuttable presumption for waste oil of § 298.10(b)(1)(ii) applies to waste oil managed by generators. Under the rebuttable presumption for waste oil of § 298.10(b)(1)(ii), waste oil containing greater than 1,000 parts per million total halogens is presumed to be a hazardous waste and shall be managed as hazardous waste and not as waste oil unless the presumption is rebutted. However, the rebuttable presumption does not apply to certain metalworking oils/fluids and certain waste oils removed from refrigeration units, as provided for in § 298.10(b)(1)(ii)(A) and (B).

(c) A generator shall perform a hazardous waste determination on any hazardous waste generated prior to mixing with waste oil and on the resultant mixture.

(d) If a generator rebuts the presumption in accordance with § 298.10(b)(1)(ii), the generator shall provide all information used to rebut the presumption to the transporter.

§ 298.22. Waste oil storage.

(a) *Storage units*. A waste oil generator may not store waste oil in units other than tanks, containers or units subject to regulation under Chapter 264a or 265a (relating to owners and operators of hazardous waste treatment, storage and disposal facilities; and interim status standards for owners and operators of hazardous waste treatment, storage and disposal facilities).

(b) *Condition of units*. A container or aboveground storage tank used to store waste oil at generator facilities shall meet the following requirements:

(1) *Be in good condition*. For example, containers and aboveground storage tanks may not exhibit severe rusting, apparent structural defects or deterioration.

(2) *Not leaking (no visible leaks)*.

(c) *Labels*.

(1) Except as provided in paragraphs (2) and (3), a container or aboveground storage tank used to store waste oil at generator facilities shall be labeled or marked clearly with the words "waste oil" by no later than December 2, 2001.

(2) Containers or aboveground storage tanks which are labeled or marked with the words "used oil" on June 2, 2001, shall be labeled or marked with the words "waste oil" by no later than June 2, 2003.

(3) Containers used in transportation may be labeled or marked with the words "used oil," instead of "waste oil," or the words required by a receiving state if the containers and vehicles are destined for recycling or disposal outside of this Commonwealth. If a person accepts waste oil from or delivers waste oil to a generator, transfer facility, or processor/rerefiner in this Commonwealth in a container used in transportation, paragraph (1) or (2) shall be met.

(4) Fill pipes used to transfer waste oil into underground storage tanks at generator facilities shall be labeled or marked clearly with the words "waste oil" by no later than December 2, 2001. Fill pipes which are labeled or marked with the words "used oil" on June 2, 2001, shall be labeled or marked with the words "waste oil" by no later than June 2, 2003.

(d) *Additional requirements for storage tanks*. Storage tanks used to store waste oil shall be designed and operated in accordance with § 299.122(b) and (c) (relating to storage tanks). For existing aboveground storage tanks, an alternative design to secondary containment may be demonstrated where the tank meets the ground.

(e) *Additional requirements for containers*. The total container height of a group of containers may not exceed 9 feet. The maximum width and depth of a group of containers shall provide a configuration and aisle space which ensures access for purposes of inspection, containment and remedial action with emergency vehicles and equipment.

(f) *Response to releases*. Upon detection of a release of waste oil to the environment not subject to Chapter 245, Subchapter D (relating to corrective action process for owners and operators of storage tanks and storage tank facilities and other responsible parties) which has occurred after June 2, 2001, a generator shall perform the following cleanup steps:

(1) Stop the release.

(2) Contain the released waste oil.

(3) Clean up and manage properly the released waste oil and other materials.

(4) Repair or replace any leaking waste oil storage containers or tanks prior to returning them to service, if necessary.

(g) *Additional requirements*. In addition to the requirements of this subchapter, a waste oil generator shall maintain, in a readily accessible place at the facility, a copy of a preparedness, prevention and contingency (PPC) plan that is consistent with the Department's most recent guidelines for development and implementation of PPC plans. Waste oil generators are subject to the applicable spill prevention, control and countermeasures (40 CFR Part 112 (relating to oil pollution prevention)) in addition to the requirements of this subchapter. Waste oil generators are also subject to the underground storage tank standards in Chapter 245 (relating to administration of the storage tank and spill prevention program) for waste oil stored in underground storage tanks whether or not the waste oil exhibits any characteristics of hazardous waste.

§ 298.23. Onsite burning in space heaters.

A generator is deemed to have a solid waste management permit-by-rule to burn waste oil in waste oil-fired space heaters if the following apply:

(1) The heater burns only waste oil that the owner or operator generates or waste oil received from household do-it-yourselfer waste oil generators.

(2) The heater is designed to have a maximum capacity of not more than 0.5 million Btu per hour.

(3) The combustion gases from the heater are vented to the ambient air.

Cross References

This section cited in 25 Pa. Code § 298.12 (relating to prohibitions); 25 Pa. Code § 298.20 (relating to applicability); 25 Pa. Code § 298.50 (relating to applicability); 25 Pa. Code § 298.60 (relating to applicability); and 25 Pa. Code § 298.61 (relating to restrictions on burning).

§ 298.24. Offsite shipments.

Except as provided in paragraphs (1)—(3), a generator shall ensure that waste oil is transported only by transporters who have obtained identification numbers. The generator shall provide the transporter with a certification that, except as provided for in § 298.10(b)(2)(ii) (relating to applicability), its waste oil has not been mixed with a hazardous waste.

(1) *Self-transportation of small amounts to approved collection centers*. Generators may transport, without an identification number, waste oil that is generated at the generator's site and waste oil collected from household do-it-yourselfers to a waste oil collection center if the following apply:

(i) The generator transports the waste oil in a vehicle owned by the generator or owned by an employe of the generator.

(ii) The generator transports no more than 55 gallons of waste oil at any time.

COMMONWEALTH OF PENNSYLVANIA
Department of Environmental Protection

Guidelines for the Development and Implementation of Environmental Emergency Response Plans

400-2200-001

PA Department of Environmental Protection
PO Box 2063
Harrisburg, PA 17105-2063

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DOCUMENT ID:	400-2200-001
TITLE:	Guidelines for the Development and Implementation of Environmental Emergency Response Plans
EFFECTIVE DATE:	April 2001 Minor changes were made throughout the document on September 7, 2004 Minor changes were made throughout the document on August 6, 2005
AUTHORITY	The Federal Clean Water Act, the Pennsylvania Clean Streams Law (35 P.S. §§691.1-691.1001), the Pennsylvania Solid Waste Management Act, the Pennsylvania Storage Tank Act, the Oil Pollution Act and regulations promulgated thereunder.
POLICY:	To plan and provide effective and efficient response to emergencies and accidents for any situation dealing with the public health, safety and the environment.
PURPOSE:	To improve and preserve the purity of the Waters of the Commonwealth by prompt adequate response to all emergencies and accidental spills of polluting substances for the protection of public health, animal and aquatic life and for recreation.
BACKGROUND:	This document is being revised to add regulatory references in Table 1 and Procedures, Item A. Revisions were made to Procedures, Items A, C, D and F. Some telephone contact names, telephone contact numbers and bureau names have been updated in Appendices IV and V. Bureau and division names have been changed on the cover page of the Addendum.
APPLICABILITY:	This document provides a one stop requirement to comply with the state and federal laws and regulations dealing with emergency planning and response and pollution prevention and contingency planning requirements (plans such as PIP, SPCC, SWPPP, etc.) for all activities to be carried out in the Commonwealth.
DISCLAIMER:	The policies and procedures outlined in this guidance are intended to supplement existing requirements. Nothing in the policies or procedures shall affect regulatory requirements. The policies and procedures herein are not an adjudication or a regulation. There is no intent on the part of DEP to give the rules in these policies that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.
PAGE LENGTH:	48 Pages
LOCATION:	Vol. 33, Tab 56

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Guidelines for the Development and Implementation of Environmental Emergency Response Plans

This document (400-2200-001) provides a one stop requirement to comply with the state and federal laws and regulations dealing with emergency planning and response and pollution prevention and contingency planning requirements (i.e., PIP, SPCC, SWPPP, etc) for all activities to be carried out in the Commonwealth.

The use of the document and compliance with it are required as part of applying for any permit or requesting approval of any action that has a potential to cause pollution of the Commonwealth's air, water and land resources. The manual is also available to download from the DEP website at: www.dep.state.pa.us.

The document may be revised from time to time or as the need arises due to changes in state/federal laws and regulations. If you have suggestions for improvement to this document or desire that future revisions be sent to you, please provide the following information to the Department.

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Guidelines for the Development and Implementation of Environmental Emergency Response Plans

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INTRODUCTION

A wide variety of industrial activities, both manufacturing and commercial, exist in Pennsylvania. Many of these activities have the potential for causing environmental degradation or endangerment of public health and safety through accidental releases of toxic, hazardous, or other pollutional materials.

In recognition of this fact, several State and Federal regulatory programs have been developed to encourage the use of preventive approaches to deal with unwarranted releases of toxic, hazardous, or other pollutants to the environment.

Table 1 lists these programs and defines the statutory and regulatory basis for each. A more detailed summary of each program is shown in Table 2 which illustrates the similarities among them. A review of the regulations and guidelines pertaining to each program more clearly illustrates these similarities. The main differences between the programs are the types of industrial activities and the nature of the polluting materials addressed.

The Department's objective is to consolidate the similarities of the State and Federal pollution incident prevention and emergency response programs into one overall program. Industrial and commercial installations which have the potential for causing accidental pollution of air, land or water, or the endangerment of public health and safety are required to develop and implement **Preparedness, Prevention and Contingency (PPC) Plans** which encompass the other Departmental program requirements.

A PPC Plan is required for any NPDES Application for Storm Water Discharge General Permits or Water Management Permits. A special addendum has been added to the document for NPDES Stormwater discharge applicants.

In the case of regulated storage tank facilities, with an aggregate aboveground storage capacity > 21,000 gallons, a **Spill Prevention Response (SPR)** plan is required. This SPR plan, in **addition to the contents** of a PPC plan, requires a specific downstream notification requirement. Those storage tank facilities that already have a PPC plan need only update the PPC plan and include the downstream notification requirement.

The Department strongly recommends that regulated facilities consolidate all required plans into one single document. For those facilities required to develop plans under SARA Title III, the Department will support deviation from the format suggested in this guidance document to ensure consistency with the SARA Title III plans provided that all required information is included in the one plan.

TABLE 1
STATE AND FEDERAL POLLUTION INCIDENT
PREVENTION AND EMERGENCY RESPONSE PROGRAMS

Plan	Implemented By	State and Federal Laws Which Apply	State and Implementing Regulations	Effective Date of Regulations
Spill Prevention Control and Countermeasure (SPCC)	U.S. EPA*	Federal Clean Water Act	40 CFR 112	1973
Preparedness, Prevention, and Contingency (PPC), or Contingency Planning	Pa. DEP as part of the Hazardous Waste Program	Pa. Solid Waste Management Act	25 Pa. Code Ch. 262a, 264a, 265a, 266a	5/01/99
	Pa. DEP as part of the Residual Waste Program	Pa. Solid Waste Management Act	25 Pa. Code Ch. 287, 288, 289, 293, 295 and 297	7/4/92
	Pa. DEP as part of the Municipal Waste Program	Pa. Solid Waste Management Act	25 Pa. Code Ch. 273, 277, 279, 281, 283 and 284	4/9/88
	Pa. DEP as part of the Oil and Gas Program[1]	Pa. Clean Streams Law, Pa Solid Waste Management Act	25 Pa. Code Ch. 91.34, 25 Pa. Code Ch. 78	1971
	Pa. DEP as part of the Water Quality Program.	PA Clean Streams Law	25 PA Code Chapter 91.34	1971
	Pa. DEP and US EPA as part of the NPDES Program	Federal Clean Water Act.	40 CFR 125 Subpart K	5/19/80
Spill Prevention Response (SPR) Plan	Pa. DEP as part of the Storage Tank Program	Pa. Storage Tank and Spill Prevention Act	Act 32-1989	8/89
Facility Response Plan (FRP)	US EPA* US Coast Guard	Oil Pollution Act	40 CFR 112	1990

(1) Complete information on PPC Plans required under the Oil and Gas Program can be found in the ***Oil & Gas Operators Manual*** available from the Bureau of Oil and Gas Management.

* Additional information is available from US EPA Region III, Philadelphia, PA, (215) 814-3292.

TABLE 2
COMPARISON OF STATE AND FEDERAL POLLUTION
INCIDENT PREVENTION AND EMERGENCY RESPONSE PROGRAMS

Aspect	Preparedness, Prevention, and Contingency (PPC) (Water)	Preparedness, Prevention, and Contingency (PPC) (Waste)	Spill Prevention Response (SPR) Plan	Spill Prevention Control, and Countermeasures (SPCC)
Purpose	Prevention/Control of accidental discharge of polluting materials to surface waste or groundwater	To minimize and abate hazards to human health and the environment from fires, explosions, or release of solid wastes to air, soil, or surface water	Prevention/Control of accidental discharge of regulated substances and downstream notification requirements	Prevention of accidental discharges of oils and hazardous substances into the waters of the United States
Types of Industrial Activities Affected	All industrial activities having potential for accidental pollution	Activities which generate, store, recycle, treat, transport, or dispose of solid wastes, activities associated with drilling and operating oil and gas wells	Activities pertaining to above ground storage facilities with >21,000 gallons of regulated substances	Non-transportation related activities with potential for discharge of oil and hazardous substances
Activities Covered?	Transportation, storage, processing of raw materials, intermediates, products, fuels, wastes	Generation, storage, transport, recycle, treatment, disposal of hazardous wastes; processing and disposal of residual or municipal wastes; road spreading operations, brine disposal	Storage and handling of regulated substances	Production, storage, processing, refining, handling, transferring, distributing
What Pollution Materials are Addressed?	All polluting materials	Any hazardous, residual, municipal, or medical wastes	Hazardous Substances and Petroleum	Oil and hazardous substances defined pursuant to Sec. 311 of the Clean Water Act

TABLE 2 (Cont.)
COMPARISON OF STATE AND FEDERAL POLLUTION
INCIDENT PREVENTION AND EMERGENCY RESPONSE PROGRAMS

Aspect	Preparedness, Prevention, and Contingency (PPC) (Water)	Preparedness, Prevention, and Contingency (PPC) (Waste)	Spill Prevention Response (SPR) Plan	Spill Prevention Control, and Countermeasures (SPCC)
Hazards Addressed	Container leaks, ruptures, spills, floods, power failures, mechanical failure, human error, strikes, vandalism	Same plus fires and explosions	Same	Same
Plan Includes	Study of past incidents, training, preventive maintenance, housekeeping, security, backup equipment, internal, external communicator, spill containment, drainage controls, inspections	Same plus additional local notification, emergency coordination, and evacuation requirements	Same, plus downstream notification requirement	Same
Amendments to Plan Required for Significant Facility or Operational Changes?	Yes	Yes	Yes	Yes
Emergency Incident Report Required?	Yes	Yes	Yes	Yes
Annual Notification/Updated	No	No	Yes	No

I. PROCEDURES FOR DEVELOPMENT AND REVIEW OF ENVIRONMENTAL EMERGENCY RESPONSE PLANS

A. Who Must Develop These Plans?

PPC

In general, any manufacturing or commercial installation which has the potential for causing accidental pollution of air, land, or water or for causing endangerment of public health and safety through accidental release of toxic, hazardous, or other polluting materials must develop, maintain, and implement a PPC Plan.*

Manufacturing or commercial waste water dischargers, which are required to obtain NPDES permits, must develop PPC plans in order to satisfy the requirements of Chapter 101 of the Department's Rules and Regulations. In addition to NPDES discharges there are a variety of other non-NPDES manufacturing or commercial installations which may be directed by the Department to develop PPC plans on a case-by-case basis.

Manufacturing or commercial installations which generate hazardous waste, or which involve treatment, recycling, storage, or disposal of hazardous waste must develop PPC plans in conformance with Chapter 262a, 264a, and 265a of the Department's regulations. Generators, of between 100 and 1,000 kilograms of hazardous waste per month, may not be required to have a PPC plan if they comply with the Preparedness and Prevention requirements in the regulations. (Note: hazardous waste transporters must also develop PPC plans under Chapter 263a. A separate PPC guidance document has been developed for transporters.)

A person who owns or operates a residual waste disposal or processing facility must develop a PPC plan under Chapters 287, 288, 289, 293, 295, and 297 of the residual waste regulations.

A person who owns or operates a municipal waste disposal or processing facility must develop a PPC plan under Chapters 273, 277, 279, 281, 283, and 284 of the municipal waste regulations.

In regards to the Oil and Gas Program, PPC Plans are required under the Clean Streams Law for approval of road spreading operations, drilling and operating oil and gas wells, and brine disposal wells. These plans are required under 25 Pa. Code Chapters 91.34 and 78.55. In addition, PPC Plans are required for NPDES and Part II Water Quality Management Permits. The Plan requirements are contained in the Oil and Gas Operators Manual

SPR

Facility owners with aboveground storage tank aggregate capacity > 21,000 gallons of a regulated substance.

*Note: PPC plans developed by hazardous waste generators and/or treatment, recycling, storage or disposal facilities, which would not otherwise be required to obtain NPDES or Water Quality Protection Part II permits, generally need only to address the PPC planning requirements as they pertain to their hazardous waste activity (unless otherwise directed by the Department).

B. How Do Existing Emergency Response Plans Fit in With Newer Program Requirements?

It should be noted that oil-related Spill Prevention, Control, and Countermeasure (SPCC) plans, which are or have been developed pursuant to EPA's oil-related SPCC regulations, should also be considered as part of an installation's overall PPC plan. Some installations may elect to integrate their oil-related SPCC plan with the PPC or SPR plan elements, or may elect to keep it as a separate chapter, or appendix, to the PPC or SPR plan.

Likewise, the additional downstream notification requirement of an SPR plan can be added to an existing plan to satisfy the "Storage Tank and Spill Prevention Act," providing all required elements of a SPR plan are completed for the existing plan.

Other types of existing emergency response plans should be handled in a similar manner.

C. Development and Submission of Plans for Review and Approval.

The plan must be developed in accordance with good engineering practice by someone who is familiar with the day-to-day operations at the site. If an outside consultant is employed for this purpose, he must be authorized to conduct a thorough study of the material storage, handling, usage, disposal, and waste management practices conducted at the installation.

Section II outlines the general content and format of PPC and SPR plans.

In general, plans should be submitted for review and approval by the Department in conjunction with applications for NPDES Water Quality Management, Storage Tank, Residual Waste Management, Municipal Water Management, or Hazardous Waste Management permits, as follows:

1. NPDES dischargers should submit (2) copies of the PPC plan for review, along with the NPDES application materials. All Stormwater General Permit applicants must complete and implement the Plans before or at the same time as application submission.

   Facilities which are not required to obtain NPDES permits, but which must obtain Water Quality Protection Part II permits, should submit (2) copies of the PPC plan for review, along with the Part II permit application.

2. Residual waste disposal/processing/transfer/composting facilities are required to develop and submit a PPC Plan as part of the residual waste permit application. Facilities permitted under permit-by-rule are required to develop PPC Plans and maintain them on site.

3. Municipal waste disposal/processing, transfer/composting facilities are required to develop and submit a PPC plan as part of the municipal waste permit application. Facilities permitted under permit-by-rule are required to develop PPC plans and maintain them on site.

   Other facilities which are not normally required to obtain NPDES or WQM Part II permits may also be required to develop and submit a PPC Plan, should conditions warrant, pursuant to Chapter 92 of the Department's regulations.

4. Hazardous waste generators are required to develop PPC plans and to maintain them on site. They are required to submit PPC plans to the Department for review upon request by the Department.

5. Hazardous waste treatment, recycling, storage, or disposal facilities should submit one copy of the PPC plan for each copy of the Hazardous Waste Part B permit application being submitted. In these situations the PPC plan is considered as part of the overall Hazardous Waste Part B permit application. Final PPC plan approval will accompany the issuance of a Hazardous Waste Management permit.

6. Aboveground storage tank facilities (with aggregate capacity >21,000 gallons) are required to submit one copy of the SPR plan to the appropriate regional DEP office for review. This plan must be developed in consultation with county and municipal emergency management agencies. Facilities that already have a PPC plan can update the PPC plan with the downstream notification requirement to satisfy this obligation.

7. Oil and gas well operators must prepare and implement a plan describing the measures to prevent pollution of the surface water and groundwater and for the control and disposal of pollutional substances and waste. A copy of the plan must be provided to the Department upon request.

D. Distribution of the Plan

A copy of the plan and any subsequent revisions must be maintained on-site. All members of the installation's organization for developing, implementing, and maintaining the plan and all emergency coordinators must review the plan and be thoroughly familiar with provisions.

In addition to the site copy and the copy submitted to the Department, other facility plans should be made available to the following agencies, to the extent which they may become involved in an actual emergency (see Description of PPC Plan Elements, Part E.1.):

Submission of copies to all of these entities is a legal requirement for hazardous waste facilities. Bulk aboveground storage tank facilities are required to submit copies to emergency management agencies, as noted below.

1. County and local Emergency Management Agencies. (This is a legal requirement for storage tank facilities with >21,000 gallons of above ground storage.)

2. Local Fire Service Agencies and/or Hazmat Team

3. Local Emergency Medical Service Agencies

4. Local Police

E. Implementation of the Plan

The provisions of the plan must be carried out whenever emergency situations arise which endanger public health and safety, or the environment.

F. Revisions of the Plan

The PPC Plan must be periodically reviewed and updated, if necessary. At minimum, this must occur when:

1. Applicable Department regulations are revised;

2. The plan fails in an emergency;

3. The installation changes in its design, construction, operation, maintenance, or other circumstances, in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency;

4. The list of emergency coordinators changes;

5. The list of emergency equipment changes; or

6. As otherwise required by the Department.

In addition to the above, the SPR or PPC plans must also be revised upon the removal or addition of a storage tank(s).

II. PLAN CONTENT AND FORMAT

General Instructions

A. Table 3 outlines the basic elements of a PPC and SPR Plan. Each of these elements is further described in this guidance document. Certain plan elements may not be entirely applicable or appropriate for a specific manufacturing or commercial installation. In these cases the person preparing the plan should act accordingly and should provide a brief explanation as to why the plan element(s) in question is not applicable or appropriate.

B. The most important thing to remember in developing your plan is that the actual effectiveness of the plan will depend upon its simplicity and readability.

Plans which are composed of several volumes of overly detailed narrative discussions and specifications tend to discourage the reader or user. Diagrams, charts, tables, maps, and plans must be easily readable and understandable, particularly in times of an actual emergency.

The plan should additionally be indexed or tabbed in such a way that the key portions which pertain to emergency response can be quickly referred to.

TABLE 3

ELEMENTS AND FORMAT OF A PPC AND SPR PLAN

A. Description of Facility

1. Description of the Industrial or Commercial Activity
2. Description of Existing Emergency Response Plans
3. Material and Waste Inventory
4. Pollution Incident History
5. Implementation Schedule for Plan Elements Not Currently in Place

B. Description of How Plan is Implemented by Organization

1. Organizational Structure of Facility for Implementation
2. List of Emergency Coordinators
3. Duties and Responsibilities of the Coordinator
4. Chain of Command

C. Spill Leak Prevention and Response

1. Pre release Planning
2. Material Compatibility
3. Inspection and Monitoring Program
4. Preventive Maintenance
5. Housekeeping Program
6. Security
7. External Factor Planning
8. Employe Training Program

D. Countermeasures

1. Countermeasures to be Undertaken by Facility
2. Countermeasures to be Undertaken by Contractors
3. Internal and External Communications and Alarm Systems
4. Evacuation Plan for Installation Personnel
5. Emergency Equipment Available for Response

E. Emergency Spill Control Network

1. Arrangements with Local Emergency Response Agencies
2. Notification Lists
3. Downstream Notification Requirement for Storage Tanks

DESCRIPTION OF PLAN ELEMENTS

A. Description of Facility

1. Description of the Industrial or Commercial Activity

- Briefly describe the nature of the industrial or commercial activity which occurs at the site. Include a general discussion of products manufactured, manufacturing processes used, wastes generated, etc.
- On a copy of a 7 1/2 minute USES map show the following:
  - Facility location
  - Facility name
  - Facility ID #
  - Name of 7 1/2 minute USES quadrangle
  - County
  - Location of facility site and site boundaries
  - Location of each storage tank
  - Location of surface drainage courses leading away from the site, and major surface streams and tributaries near the site
  - Location of any known public and private surface water intakes downstream from the site
- Include a drawing which shows the following:
  - General layout of the site
  - Property boundaries
  - Areas occupied by manufacturing or commercial activities
  - Raw materials and product storage
  - Loading and unloading operations
  - High risk areas where spills and leaks most likely would occur
  - Waste handling, storage, and treatment facilities
  - Drains, pipes, and channels which lead away from potential leak or spill areas
  - Outfall pipes which discharge to surface streams or drainage channels
  - Secure and open-access areas
  - Entrance and exit routes to the site

2. Description of Existing Emergency Response Plans

- Briefly describe any existing plan, which has been previously developed by the installation, for the purpose of pollution incident prevention or emergency response preparedness. If the plan has previously been

approved by the Department, this should also be noted, along with the date of approval.

- Provide a brief discussion as to how the existing plan relates to the overall PPC or SPR Plan being developed. The degree to which the existing plan encompasses some, or all, of the PPC/SPR Plan elements should also be noted. When the PPC has been developed and an SPR plan is needed, the downstream notification requirement information can be added as an addendum.

  Similar plans which have been prepared for agencies other than DEP should also be described and cross-referenced to the maximum extent possible to the PPC Plan elements so as to minimize rewriting. For example, an oil related Spill Prevention Control and Countermeasure (SPCC) Plan which has been developed to comply with EPA's regulations 40 CFR 112, may be treated as an appendix, or as a separate chapter, to the overall PPC/SPR Plan for an installation.

3. Material and Waste Inventory

- Identify and list by common chemical name and trade name, the locations, sources and quantities of raw chemical materials, commercial chemical products, manufacturing chemical intermediates, and process wastes managed at the installation which have the potential for causing environmental degradation or endangerment of public health and safety through accidental releases. Requests for confidentiality of this information will be handled in accordance with Department regulations.

  Detailed descriptions must be available for materials that have a high potential for spills, discharges, explosions, or fires (such as those stored in bulk storage). Materials that have a low potential for spills, discharges, explosions, or fires (such as those used and stored in small quantities in a laboratory) should be minimally detailed.

  This information should be used to evaluate the prevention, containment, mitigation, cleanup, and disposal measures which would be used in the event of a spill, discharge, explosion, or fire. As new materials are added to the list, their pollution potential should be evaluated.

- Attach to this plan the Material Safety Data Sheet (MSDS) for each material in storage (the MSDS must be completed to the extent it meets the requirements of 29 CFR 1910.1200(9) Hazardous Communications Standard Requirements).

4. Pollution Incident History

- List the previous pollution incidents, the date, the material or waste spilled, approximate amount spilled, environmental damage, and action taken to prevent a recurrence.

  An important criteria in determining the effectiveness of the plan and its implementation is the history of incidents at the installation. A history of no incidents suggest that the practices and procedures at the site are effective. For a site with a history of incidents, it is important to

investigate the reasons for the spills and the response of the company in minimizing the potential for their recurrence.

5. Implementation Schedule for Plan Elements Not Currently in Place

- Provide a list of any missing or incomplete aspects of the plan and a time schedule when they will be implemented.

  An implementation schedule, or any elements of the plan not currently in place, must be developed. Each missing or incomplete aspect of the plan should be addressed and discussed within the applicable elements of the plan. Missing or incomplete aspects must be implemented as soon as possible and in conformance with all Department regulations and requirements.

B. Description of How Plan is Implemented by Organization

1. Organizational Structure of Facility for Implementation

- Describe the organizational structure for implementation of the plan.
- Describe the duties and responsibilities of the individuals within the organization that will implement the plan.

  Each installation must develop a permanent organizational structure for developing, implementing, and maintaining the plan. The exact nature and make-up of this structure will vary considerably, depending upon the size and complexity of the installation.

  For example, a large manufacturing company may either establish a formal preparedness-response committee, or it may assign this responsibility to an existing organization within the company, such as a safety committee or a preventive maintenance group. A small manufacturing or commercial facility may only have one or two individuals responsible for developing and implementing the plan. However, the preparedness-response organization, regardless of its size, must be given both the responsibility and authority by management for developing, implementing, and maintaining the plan.

  The main duties and responsibilities of the preparedness-response organizational structure should include identification of materials and wastes handled (materials inventory), identification of potential spill sources (risk assessment), establishment of spill-reporting procedures, visual inspection programs review of past incidents and spills, and countermeasures utilized. In addition, the preparedness-response organizational structure should be responsible for coordination needed to implement the goals of the plan, coordination of the activities for spill cleanup, notification of authorities and establishment of training and educational programs for installation personnel.

  The preparedness response organizational structure should have the overall responsibility for periodically reviewing and evaluating the plan and instituting appropriate changes at regular intervals. The organizational structure should also be responsible for the review of new construction and process changes at an installation relative to the plan.

The organizational structure should also evaluate the effectiveness of the overall plan and make recommendations to management on related matters.

2. List of Emergency Coordinators

- Provide an up-to-date list of names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator. Where more than one is listed, one must be named as the primary coordinator, and others shall be listed in the order in which they will assume responsibility as alternates.

  At all times there must be at least one employee either on the installation's premises or on-call with the responsibility for coordinating all emergency response measures. The emergency coordinator must be thoroughly familiar with all aspects of the plan, all operations and activities, the location and characteristics of all materials handled, the location of all records and the lay out of the installation. In addition, this individual should have the authority to commit the resources necessary to carry out the plan.

3. Duties and Responsibilities of the Coordinator

- Describe the duties and responsibilities of the emergency coordinator specific to your installation or activity in the event of an imminent or actual emergency.

  During an emergency, the emergency coordinator should activate alarm systems, notify emergency response agencies, identify the problem, assess the health or environmental hazards, and take all reasonable measures to stabilize the situation. The emergency coordinator should also be responsible for follow-up activities after the incident such as treating, storing, or disposing of residues and contaminated soil, decontamination and maintenance of emergency equipment, and submission of any reports. Appendix I describes some example duties and responsibilities of the emergency coordinator.

4. Chain of Command

- Provide an internal list, by position, of key employees that must be contacted in the event of an emergency or spill.

  List the positions, office telephone extensions, and home phone numbers (if applicable) of key employees, in the order of responsibility that would be contacted in the event of an emergency or spill.

  This list, along with the notification procedure, should be posted on bulletin boards or other conspicuous locations around the installation.

C. Spill Leak Prevention and Response

1. Pre-release Planning

- Describe the sources and areas where potential spills and leaks may occur, the direction of flow of spilled materials, and the pollution incident prevention practices (see Appendix II) specific to the source or area.

- Provide separate drawings, plot plans (or include in the general layout drawings), showing sources and quantities of materials and wastes. Sources and areas where potential spills may occur, and pollution incident prevention practices (see Appendix II).

  The plan should include a prediction of the direction of the flow of materials spilled as a result of equipment failure, accident, or human error. Particular care and attention should be paid to evaluating the following: raw materials storage, in plant transfer, process and materials handling, intermediary and product storage (if applicable), truck and rail car loading and unloading, and waste handling and storage. Describe and identify valving for the storage tank and system to be used to partition off each storage tank in case of a release.

  Liquid storage areas must have containment capacity sufficient to hold the volume of the largest single container or tank, plus a reasonable allowance for precipitation based on local weather conditions and plant operations. Containment systems must be sufficiently impervious to contain spilled material or waste until it can be removed or treated. Tank or container materials must be compatible with the material or waste stored.

  Pollution incident prevention practices to eliminate contaminated runoff, leaching, or windblowing must be implemented in non liquid storage areas. Provisions must be made to contain or manage contaminated run-off or leachate from these areas.

  Piping, processing, and materials handling equipment at in-plant transfer, process, and materials handling areas must be designed and operated so as to prevent spills. Containment practices should be instituted at processing and handling areas including floor drains, storm sewers, or drainage swales to prevent an accidental discharge. Protection such as covers or shields to prevent windblowing, spraying, and releases from pressure relief values from causing a discharge should be provided as appropriate.

  Truck and rail car loading and unloading areas must have sufficient containment capacity to hold the volume of the largest tank truck or rail car loaded or unloaded at the installation, plus a reasonable allowance for precipitation. Any overhead piping must have adequate clearance over roadways. Containment systems must be sufficiently impervious to contain spilled material or waste until it can be removed or treated.

2. Material Compatibility

- Summarize the engineering practices followed with regard to material compatibility such as materials of construction, corrosion, etc.

  Engineering practices with regard to material compatibility normally consist of an appraisement of the compatibility of construction materials of tanks, pipelines, etc., with their contents; the reaction of materials or wastes when intentionally or inadvertently mixed or combined; and, the compatibility of a container such as a storage tank or pipeline with its environment.

Specific consideration should be given to the procedures and practices delineating the mixing of materials and prohibiting mixing of incompatible materials which may result in fire, explosion, or unusual corrosion. Thorough cleaning of storage vessels and equipment before reuse should be standard practice to ensure that there is no residual incompatible with the next or later materials used. Coatings or cathodic protection should be considered for protecting buried pipelines or storage tanks from corrosion.

3. Inspection and Monitoring Program

- Describe the type and frequency of inspections and monitoring for leaks or other conditions that could lead to spills or emergency situations.

  Typical inspections include the following: pipes, pumps, values, and fittings for leaks; tanks for corrosion; tanks supports and foundations for deterioration; chemical material piles for windblowing; evidence of spilled materials along drainage ditches; effectiveness of housekeeping practices; damage to shipping containers; leaks, seeps, or overflows at waste treatment, storage, or disposal sites; etc. Areas that should be inspected include the following: storage, loading and unloading, transfer pipelines, waste treatment facilities, and disposal sites. The use of an inspection checklist may be useful in an inspection and monitoring program.

  Routine monitoring should be performed to determine the physical conditions and liquid levels in tanks, the quality of plant site runoff in diked areas, etc., either by manual testing or in-situ instrumentation. Monitoring should be used to initiate a warning of the need for immediate corrective action to prevent a spill or other emergency condition. Monitoring systems should be used in conjunction with a communications or alarm system to immediately notify personnel of abnormal conditions.

  An inventory system should also be considered for keeping track of those materials having the greatest potential for causing problems due to leaks, spills, or mishandling.

  As a minimum, the frequency of inspection and monitoring must be in accordance with the applicable Department regulations and permits. Appendix II includes some additional inspection and monitoring examples.

4. Preventive Maintenance

- Describe the aspects of the preventive maintenance program for equipment and systems relating to conditions that could cause environmental degradation or endangerment of public health and safety.

  Describe the procedures for the correction of those conditions by adjustment, repair, or replacement before the equipment or system fails.

  A good preventive maintenance program includes the following: (1) identification of equipment and systems to which the program should apply; (2) periodic inspections of identified equipment and systems; (3) periodic testing of equipment and systems, (such as routine calibration

of environmental monitoring equipment); (4) appropriate adjustment, repair, or replacement of parts; and (5) complete recordkeeping of the preventive maintenance activities, inspection and test results, calibration dates, repairs, replacement, and adjustments to the applicable equipment and systems.

5. Housekeeping Program

- Identify the areas and the type of housekeeping practices that should apply to reduce the possibility of accidental spills and safety hazards to plant personnel.

  Examples of good housekeeping include the following: neat and orderly storage of chemicals; prompt removal of small spillage; regular refuse pickup and disposal; maintenance of dry, clean floors by use of brooms, vacuum cleaners, or cleaning machines; and, provisions for the storage of containers or drums to keep them from protruding into open walkways, pathways, or roads.

  Dry chemicals should be swept or cleaned up to prevent possible washdown to drains and drainage ditches or windblowing of the material to other areas of the plant. Small liquid accumulations on the ground or on a floor in a building should be cleaned up to prevent discharge or transport to other areas. See Appendix I for additional examples.

6. Security

- Describe the security procedures employed at the installation to prevent accidental or intentional entry that could result in a violation of Departmental regulations, or injury to persons or livestock.

  Security systems described in the plan should address, as necessary: fencing; lighting; vehicular traffic control; access control; visitors passes; locked entrances; vandalism; locks on drain valves and television monitoring. Security procedures must be in accordance with applicable Department regulations.

7. External Factor Planning

- Describe the possible effects of power outages, strikes, floods, snowstorms, etc., and the action to be taken to alleviate any resulting effects to public health and safety or the environment.

8. Employe Training Program

- Summarize the training program given to employees which will enable them to understand the processes and-materials with which they are working, the safety and health hazards, the practices for preventing, and the procedures for responding properly and rapidly to spills.

  At a minimum, the training program must be designed to ensure that personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment systems including, where applicable: procedures for using, inspecting, repairing, and replacing emergency and monitoring equipment; key parameters for

automatic cut-off systems; communications and alarm systems; response to fires and explosions; site evacuation procedures; and shut down of operations.

In addition the employee training program should address other aspects of the preparedness-response program such as preventive maintenance, inspection and monitoring, housekeeping practices, etc. The training program must be designed and conducted in accordance with applicable Department regulations. Records of the employes' attendance in the training program should be included in personnel files.

D. Countermeasures

1. Countermeasures to be Undertaken by Facility

- Provide specific countermeasures which will be undertaken by facility personnel in the event of a release. Include valve activations, equipment isolations, flow diversions, boom deployment, and any other activities which will be undertaken to halt the migration of the contaminant off site and to mitigate the consequence of the release.

2. Countermeasures to be Undertaken by Contractors

- Provide a list of emergency response contractors, phone numbers, and the services they will provide.

  The services of nearby contractors should be investigated and arrangements made for the prompt performance of contractual services on short notice. Equipment suppliers should be contacted to determine the availability and means of delivery of equipment needed for removing pollution or hazards to the public health and safety. Describe arrangements with these contractors and the time frame in which they can respond with required equipment.

3. Internal and External Communications and Alarm Systems

- Describe the internal communications or alarm used to provide immediate emergency instruction (voice or signal) to installation personnel.
- Describe the external communications or alarm system used to summon emergency assistance from local police or fire departments.

  Examples of communications or alarm systems are: hand held two way radios; CB radios; telephones; fire or police alarms; PA systems; beeper or voice pagers, etc.

4. Evacuation Plan for Installation Personnel

- Describe the evacuation plan for facility personnel where there is a possibility that evacuation could be necessary.

  The plan must describe signals to be used to begin evacuation, primary evacuation route, and alternate evacuation routes (in cases where primary routes could be blocked by releases of hazardous materials, wastes, gases, or fires). Periodic drills should be conducted to evaluate the effectiveness of the plan.

5. Emergency Equipment Available for Response

- Provide an up-to-date list of available emergency equipment. The list must include the location, a physical description, and a brief description of the intended use and capabilities of each item on the list.
- Describe the procedures for maintenance and decontamination of emergency equipment.

All installations should have equipment available to allow personnel to respond safely and quickly to emergency situations. Some examples of emergency equipment are portable fire extinguishers, fire control equipment (including special extinguishing equipment such as that using foam, inert gas, or dry chemicals), spill control equipment, decontamination equipment, self contained breathing apparatus, gas masks, and emergency tool and patching kits. See Appendix III for more examples.

All equipment must be tested and maintained as necessary to assure its proper operation in time of emergency. After an emergency, all equipment must be decontaminated, cleaned, and fit for its intended use before normal operations resume.

E. Emergency Spill Control Network

1. Arrangements with Local Emergency Response Agencies and Hospitals

- Provide a list of local emergency response agencies and hospitals. Include the phone numbers and describe arrangements concerning the emergency services they will provide.

Arrangements must be made, as appropriate, to inform local emergency response agencies, and hospitals concerning the type of materials or wastes handled at the installation and the potential need for services. Arrangements should be made which will designate who will be the primary emergency response agency and who will provide support services during emergencies.

Efforts should be made to familiarize police, fire departments, emergency response teams, and the County Emergency Management Coordinator with the layout of the installation, the properties and dangers associated with the hazardous materials handled, places where personnel would normally be working, entrances to roads inside the facility, and the possible evacuation routes. At a minimum, this requirement must be in accordance with applicable Department regulations.

2. Notification Lists

- Provide a list of agencies and phone numbers that must be contacted in the event of an emergency or spill.

A list must be developed for notifying State, local, and Federal regulatory agencies of all spills. Such a list should include, as applicable: PA DEP (see Appendix IV); PA Emergency Management Agency; County Health Department; County EMA; PA Fish Commission; the National Response

Center (U.S. EPA and U.S. Coast Guard); local police and fire departments; the local sewage treatment plant (for discharges to sewer system); and downstream public water supplies, industrial water users, and recreation areas.

3. Downstream Notification Requirement for Storage Tanks

- This is an additional requirement of storage tank facilities with aggregate aboveground storage >21,000 gallons of regulated substances. It can be addended to an updated PPC plan so as to meet the SPR plan requirement.

  The requirement includes a 20-mile downstream Notification List, an annual notification requirement, and an annual Notification List update. Lists of downstream users may be developed from information provided by your county Emergency Management Agency.

  Downstream Notification List shall include all municipalities and surface water users within 20 downstream miles of the tank facility. Surface water users include drinking water companies, and industries that utilize surface water intakes; and municipalities include each county, township, city and borough located within this downstream corridor. This list is to be developed via assistance from the local emergency management agency. (Refer to Appendix V for an example.)

  Annual Written Notification must be given to downstream water users and municipalities on the Notification List. This written notification at a minimum must include a detailed inventory of the type and quantity of material in storage at the facility.

  Annual Update must be developed each year in cooperation with the local Emergency Management Agency. This Notification List update will show any changes in contacts, users, telephone #'s needed for emergency downstream notification and the annual written notification. Also, any changes in the emergency response organization (such as telephone numbers) should be updated.

APPENDIX I

EXAMPLES OF AN EMERGENCY COORDINATOR'S DUTIES AND RESPONSIBILITIES

Whenever there is an imminent or actual emergency situation, the emergency coordinator must immediately:

1. Activate facility alarms or communications systems, where applicable, to notify facility personnel; and

2. Notify local emergency response agencies including the Department.

   Whenever there is an emission or discharge, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of emitted or discharged materials. He may do this by observation or review of records and, if necessary, by chemical analysis.

   Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the emission or discharge, fire, or explosion. This assessment must consider both direct and indirect effects of the emission, discharge, fire, or explosion.

   If the emergency coordinator determines that the installation has had an emission, discharge, fire, or explosion which would threaten human health or the environment, he must immediately notify the applicable local authorities including the county emergency management agency and indicate if evacuation of local areas may be advisable; and immediately notify the Department in accordance with Appendix IV; the National Response Center; and the Pennsylvania Emergency Management Agency; and report the following:

   a. Name of the person reporting the incident

   b. Name and location of the installation

   c. Phone number where the person reporting the spill can be reached

   d. Date, time, and location of the incident

   e. A brief description of the incident, nature of the materials or wastes involved, extent of any injuries, and possible hazards to human health or the environment

   f. The estimated quantity of the materials or wastes spilled, and

   g. The extent of contamination of land, water, or air, if known.

   When there is a release from an aboveground storage tank which threatens the water supply of downstream users, these downstream users (on the Downstream Notification List) must be notified within 2 hours of the release. Priority for notification is by closest proximity to the release site.

   During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fire, explosion, emission, or discharge do not occur, reoccur, or spread to other materials or wastes at the installation. These measures shall include where applicable, stopping manufacturing processes and operations, collecting and containing released materials or wastes, and removing or isolating containers.

   If the installation stops operations in response to a fire, explosion, emission, or discharge, the emergency coordinator must ensure that adequate monitoring is conducted for leaks, pressure

buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.

Immediately after an emergency, the emergency coordinator, with Departmental approval, must provide for treating, storing, or disposing of residues, contaminated soil, etc., from an emission, discharge, fire, or explosion at the installation.

The emergency coordinator must insure that in the affected areas of the installation, no material or waste incompatible with the emitted or discharged residues is processed, stored, treated, or disposed of until cleanup procedures are completed; and, all emergency equipment listed in the plan is cleaned and fit for its intended use before operations are resumed.

Within 15 days after the incident, the installation must submit a written report on the incident to the Department. The report must include the following:

a. Name, address, and telephone number of the individual filing the report

b. Name, address, and telephone number of the installation

c. Date, time, and location of the incident

d. A brief description of the circumstances causing the incident

e. Description and estimated quantity by weight or volume of materials or wastes involved

f. An assessment of any contamination of land, water, or air that has occurred due to the incident

g. Estimated quantity and disposition of recovered materials or wastes that resulted from the incident, and

h. A description of what actions the installation intends to take to prevent a similar occurrence in the future.

APPENDIX II
POLLUTION INCIDENT PREVENTION PRACTICES

Pollution incident prevention practices can be divided into the following four categories: prevention, containment, mitigation and ultimate disposition. The listings below provide specific examples of each category.

1. PREVENTION

Visual Observations of:

Storage facilities
Transfer pipelines
Loading and unloading areas
Waste handling and storage areas

Detailed Inspections of:

Pipes, pumps, valves, and fittings for leaks
Tanks for corrosion (internal and external)
Dry material or waste stockpiles for windblowing
Tanks supports or foundations for deterioration
Walls for stains
Drainage ditches and areas around old tanks for evidence of spilled materials
Primary or secondary containment for deterioration
Housekeeping practices
Shipping containers for damage
Material or waste conveyance systems for leaks, spills, or overflows
Integrity of stormwater collection systems
Waste storage, treatment, or disposal sites for leaks, seeps, and overflows

Monitoring

Liquid-level detectors
Alarm systems
Pressure and temperature gauges
Analytical testing instrumentation
Pressure drop shut-off devices
Flow meters
Valve positioning indicators
Equipment operational lights
Excess-flow valves
Automatic runoff diversion devices
Routine sample collection (including groundwater and monitoring wells)
Redundant instrumentation
Records (all monitoring results/findings)

Nondestructive Testing

Hydrostatic pressure tests
Acoustical emission tests
Radiographic tests
Magnetic particle tests
Liquid Penetration
Records of tank wall thicknesses and results of all testing

2. CONTAINMENT

Secondary Containment

Dikes
Curbs
Depressed areas
Storage basins
Sumps
Drip pans
Liners
Double piping
Sewer collection systems

Flow Diversion

Trenches
Drains
Graded pavement
Grating
Overflow structures
Sewers
Culverts

Vapor Control

Water spray
Vapor space
Vacuum exhaust

Dust Control

Hoods
Cyclone collectors
Bag-type collectors
Filters
Negative-pressure systems
Water spraying

Sealing

Foamed plastic compounds used for plugging leaks in tanks

3. MITIGATION

Physical Clean-up

Brooms
Shovels
Plows

Labeling

U.S. DOT or National Fire Protection Association's (NFPA) designation on tanks and pipelines
Color coding of tanks and pipelines
Warning signs

Vehicle Positioning

Physical barriers (e.g., wheel chocks)
Underlying drains
Designated loading and unloading areas

Covering

Tarpaulins over outdoor dry waste or material stockpiles
Buildings or roofs over outside processes or stockpiles
Vegetation, rock, or synthetic covering on surface impoundments

Pneumatic and Vacuum Conveying

Loading and unloading by air pressure or vacuum
Safety relief valves
Dust collectors
Air slide trucks and rail cars

Preventive Maintenance

Periodic inspections
Periodic testing to determine soundness of system
Identification of equipment and systems that need to be upgraded, repaired, or replaced
Appropriate adjustment, repair, or replacement of parts
Complete recordkeeping of all repairs, upgrading, replacements, and adjustments; and all testing findings/results after system modifications were made

Good Housekeeping

Neat and orderly storage of chemicals
Prompt removal of small spillage
Regular garbage pickup and disposal
Maintenance of dry, clean floors by use of brooms, vacuum cleaners, etc.
Maintenance of proper spacing for pathways and walkways between containers and drums
Stimulation of employee interest in good housekeeping

Employee Training Programs

Materials Inventory Systems
Material Safety Data Sheets

Mechanical Clean up

Vacuum systems
Pumps
Pump/bag system

Chemical Clean up

Sorbents

activated carbon
polyurethane and polyolefin spheres, beads, and foam belts
amorphous silicate glass foam
clay
sawdust

Gelling agents

polyelectrolytes
polyacrylamide
butylstyrene copolmyers
polyacrylonitrile
polyethylene oxide

Foams

rockwood alcohol
protein
fluoroprotein
aqueous film-forming foam
polar liquid foam
surfactant-based foam

Volatilization

distillation
stripping
evaporation

Carbon absorption
Coagulation/precipitation
Neutralization
Ion exchange
Chemical oxidation
Biological treatment

4. ULTIMATE DISPOSITION

Thermal oxidation
Land disposal
Recycle
Recover
Reuse
Detoxification

APPENDIX III
EXAMPLES OF EMERGENCY EQUIPMENT

Special equipment is often required and may be needed quickly in an emergency. Examples include the following:

Aerial ladder

Absorbant materials

Accident investigation kit

Air compressor

Air supply, for breathing equipment

Backhoe

Basket stretchers

Bulldozer

Bullhorn

Camera/photo equipment

Cellar pump

Chain hoist

Chain saw

Chemical neutralizers

Crane

Cutters (power)

Decontamination equipment with a clean Resuscitator water supply (70-80%F)

Ejector - smoke

Elevated platform truck

Explosimeters

Fans

Firefighting equipment

First aid supplies

Foam concentrate supply

Foam generators

Forklift

Fuel Supply

Geiger counter

Generator trailer

Heaters, portable

Helicopter

Hydraulic spreader jacks

Inhalator

Jack hammer

Jacks

Ladder Truck

Lighting equipment, portable

Medical supplies

Metal saw (power)

Public address system

Radio

Resuscitator

Sand supply

Self-contained breathing apparatus (SCBA)

Self-contained underwater breathing apparatus (SCUBA)

Submersible pump

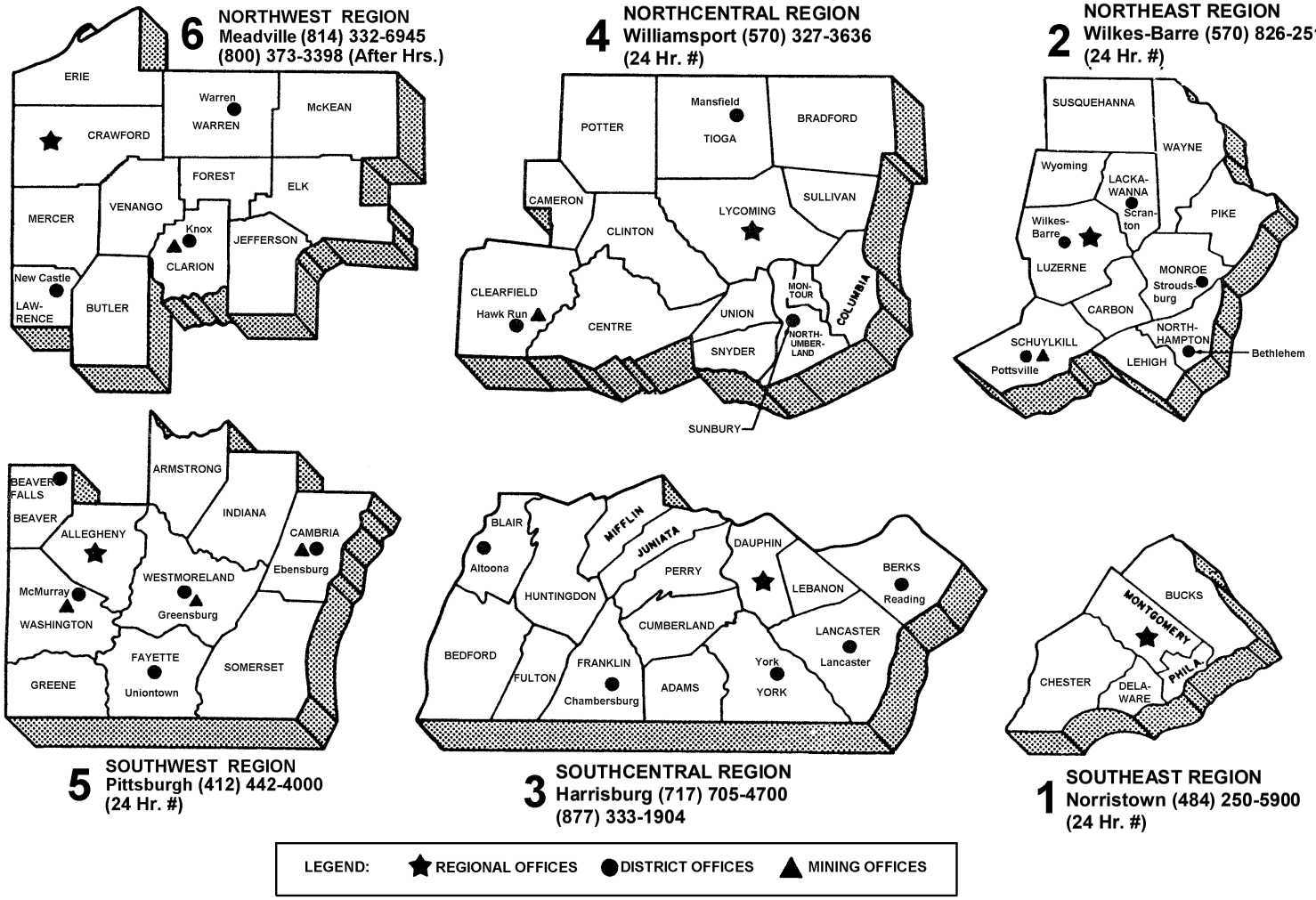
Tank truck

Tool box

Welding/cutting equipment

Water pump

APPENDIX IV
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
EMERGENCY NOTIFICATION NUMBERS
STATEWIDE EMERGENCY NOTIFICATION NUMBER (800) 541-2050 (PA ONLY)
OR (717) 787-4343
(To Be Used If There Is A Problem In Contacting The Region)



APPENDIX V
PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Field Operations--Environmental Cleanup Program
Regional Storage Tank List

Region	Contact
Southeast Regional Office 2 East Main Street Norristown, PA 19401-4915 Telephone: (484) 250-5900	Kathy Nagle
Northeast Regional Office 2 Public Square Wilkes-Barre, PA 18711-0790 Telephone: (570) 826-2511	Ron Brezinski
Southcentral Regional Office 909 Elmerton Avenue Harrisburg, PA 17110-8200 Telephone: (717) 705-4700	Gregory Bowman
Northcentral Regional Office 208 W. Third Street Williamsport, PA 17701 Telephone: (570) 327-3636	Steve Webster
Southwest Regional Office 400 Waterfront Drive Pittsburgh, PA 15222 Telephone: (412) 442-4000	Gale Campbell
Northwest Regional Office 230 Chestnut Street Meadville, PA 16335 Telephone: (814) 332-6945	Daniel F. Peterson

In the event no contact with the Regional Office is made, the Department Emergency number (717) 787-4343 shall receive calls during and after business hours, 24 hours daily and holidays and weekends.

Oil and Gas Management Program

South Regional Office 400 Waterfront Drive Pittsburgh, Pa 15222-4745 (412) 442-4000	David F. Janco
Northwest Regional Office 230 Chestnut Street Meadville, PA 16335 (814) 332-6945	Craig Lobins

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Field Operations--Water Management

Region	Contact
Southeast Regional Office 2 East Main Street Norristown, PA 19401-4915 Telephone: (484) 250-5900	James Newbold
Northeast Regional Office 2 Public Square Wilkes-Barre, PA 18711-0790 Telephone: (570) 826-2511	Kate Crowley
Southcentral Regional Office 909 Elmerton Avenue Harrisburg, PA 17110-8200 Telephone: (717) 705-4700	Jim Spontak
Northcentral Regional Office 208 W. Third Street Williamsport, PA 17701 Telephone: (570) 327-3636	Daniel Alters
Southwest Regional Office 400 Waterfront Drive Pittsburgh, PA 15222 Telephone: (412) 442-4000	Steve Balta
Northwest Regional Office 230 Chestnut Street Meadville, PA 16335 Telephone: (814) 332-6945	Dave Milhous

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Field Operations--Waste Management
Regional Contact

Region	Contact
Southeast Regional Office 2 East Main Street Norristown, PA 19401-4915 Telephone: (484) 250-5900	Facilities Manager
Northeast Regional Office 2 Public Square Wilkes-Barre, PA 18711-0790 Telephone: (570) 826-2511	Facilities Manager
Southcentral Regional Office 909 Elmerton Avenue Harrisburg, PA 17110-8200 Telephone: (717) 705-4700	Facilities Manager
Northcentral Regional Office 208 W. Third Street Williamsport, PA 17701 Telephone: (570) 327-3636	Facilities Manager
Southwest Regional Office 400 Waterfront Drive Pittsburgh, PA 15222 Telephone: (412) 442-4000	Facilities Manager
Northwest Regional Office 230 Chestnut Street Meadville, PA 16335 Telephone: (814) 332-6945	Facilities Manager

APPENDIX VI
IGMARS STORAGE FACILITY
Harrisonberg, PA
Example
DOWNSTREAM NOTIFICATION LIST FOR YEAR 1992

Facility	Address	Mile Mark	Contact	Telephone
Harrison County	PO Box 15 Harrison Co. Courthouse Harrisonberg, PA	-	Ronald Swoyer Co. Emergency Mgt. Coordinator	Office: (717) 674-1212 Emergency: (717) 674-3434
Greenly Township	PO Box 498, RD 1 Harrisonberg, PA 19865	0	Donald Trump	Office: (717) 765-3468 Emergency: (717) 765-4579
Harrisonberg City	PO Box 21, City Hall Harrisonberg, PA 19869	3	Jay Miller	Office: (717) 674-2185 Emergency: (717) 674-2194
Harrisonberg Water	Harrisonberg, PA	6	Richard Miles	Office: (717) 254-8904 Emergency: (717) 254-8910
Harrison Township	Harrison Township Building Krissville, PA 19872	10	Charles Davis Township Manager	Office: (717) 760-3120 Emergency: (717) 760-3123
Harrison Township Auth.	PO Box 234 Krissville, PA 19870	12	Kemp Olsen Auth. Manager	Office: (717) 760-2334 Emergency: (717) 760-2333
Villa Assoc.	Box 29 Krissville, PA 19880	14	George Kay	Office: (717) 675-8960 Emergency: (717) 675-8961
Harrison Water Auth.	Box 28 Krissville, PA 19879	16	Justine Keener	Office: (717) 675-9004 Emergency: (717) 675-9005

Igmars Emergency Coor. Date

NOTE: This Downstream Notification List when annually updated should be dated for the year updated and signed by the storage tank facility's emergency coordinator.

ADDENDUM

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

SUPPLEMENTAL GUIDANCE FOR THE DEVELOPMENT AND IMPLEMENTATION OF PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLANS UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORM WATER PERMITTING PROGRAM

September 2001

BUREAU OF WATER STANDARDS AND FACILITY REGULATION
DIVISION OF PLANNING AND PERMITS

FORWARD

The "Supplemental Guidance for the Development and Implementation of Preparedness, Prevention and Contingency (PPC) Plans under the National Pollutant Discharge Elimination System (NPDES) Storm Water Permitting Program" has been prepared to provide those owners, operators, and municipalities who must prepare Preparedness, Prevention and Contingency (PPC) Plans (in accordance with the General Permit for Discharges of Storm Water from Industrial Activities and the Department's Chapter 91 regulations) with guidance on what storm water issues must be addressed. This supplemental guidance, when used with the existing guidance entitled "Guidelines for the Development and Implementation of Environmental Emergency Response Plans", hereafter called the PPC guidance or guidelines, will provide complete information on incorporating the new storm water requirements into existing or new PPC Plans for facilities seeking coverage under the general permit to discharge storm water associated with industrial activity.

Section 1 provides an introduction to the regulatory requirements for storm water discharges, the General Permit for Discharges of Storm Water From Industrial Activities and the special condition within the permit to develop and implement a Preparedness, Prevention and Contingency Plan.

Section 2 follows the format of the original guidelines. Where changes must be incorporated to address the new storm water requirements, the necessary modifications or addendums are explicitly presented.

It is emphasized that the original guidance pertains to emergency response plans that include potential releases, their controls, and management practices that are applicable to facilities regardless of whether they discharge storm water associated with industrial activity. The supplemental guidance's requirements, on the other hand, have specific requirements that focus exclusively on managing storm water discharges associated with industrial activity.

SECTION 1

INTRODUCTION

The Department of Environmental Protection is authorized by law to protect the quality of both surface and underground waters of the Commonwealth through the prevention and abatement of water pollution. Specifically, the federal Clean Water Act and the Pennsylvania Clean Streams Law require that all point source discharges of pollutants be authorized and regulated under a National Pollutant Discharge Elimination System (NPDES) permit. Point source discharges that are not regulated under a NPDES permit are in violation of the federal Clean Water Act and the Pennsylvania Clean Streams Law, and may be subject to applicable penalties and fines.

Recent revisions to the federal NPDES regulations (55 FR 47990; November 16, 1990) require that permit applications be submitted and NPDES permits be issued for storm water discharges associated with industrial activity (see the Bureau of Water Quality Management's "Notice of Intent Requirements for Coverage Under the General Permit for Discharges of Storm Water From Industrial Activities" for definition of industries covered). In accordance with the Department's regulations at 25 Pa. §§92.81 - 92.83, the Department of Environmental Protection has developed and issued a general NPDES permit that sets forth the requirements and conditions to control storm water discharges from industrial activities.

Special Permit Condition for the Development and Implementation of a PPC Plan

The General Permit for Discharges of Storm Water from Industrial Activities requires operators of facilities covered under the permit to develop and implement a Preparedness, Prevention and Contingency (PPC) Plan in accordance with 25 Pa. Code §91.34 and the PPC guidelines contained in this document prior to authorization to discharge under this general permit.[1] The PPC Plan, once implemented, will provide best management practices (BMPs) to control the discharges of pollutants to receiving waters. In general, the PPC Plan is required to identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the PPC Plan is required to describe the implementation of practices that are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility.

This supplemental guidance provides the additional elements and requirements needed to address storm water issues in the PPC Plan required under the general permit. When used in conjunction with this document, the terms and conditions of the permit should be satisfied and the appropriate "spill prevention control" and "storm water control" - requirements should be addressed.

[1] See Part C.3.a. of the General permit.

SECTION 2

MODIFICATIONS TO EXISTING ELEMENTS AND FORMAT OF THE PPC PLAN

Modify or add to Section II of the PPC guidance, the elements beginning with A (Description of Facility). Each modification or addendum is identified explicitly in the following pages using the format contained in this document. In cases where no modifications to the original guidelines are necessary, the element heading is presented and the user is referred to the requirements in the PPC guidance. Again, users or developers of PPC Plans that meet the requirements of a general permit to discharge storm water associated with industrial activity must fulfill all of the requirements of the PPC guidance and the additional requirements and addendums of this supplemental guidance.

A. Description of Facility

1. Description of the Industrial or Commercial Activity

Add the following to the requirements in the original guidance for this section.

- Provide a narrative description of significant materials[2] that have been treated, stored or disposed in a manner to allow exposure to storm water within the three years prior to the issuance of the general permit and the present; the method of on-site storage or disposal; materials management practices that were employed to minimize contact of these materials with storm water runoff between the time of three years prior to the date of the issuance of this permit and the present; materials loading and access areas; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.
- On the 7 1/2-minute USGS map show the following:
  - -- Provide an outline of the drainage area for each storm water outfall.
- On the drawings required in the original guidance show the following:
  - -- Indicate existing structural control measures to reduce pollutants in storm water runoff.
  - -- Identify commercial and industrial activities that are exposed to precipitation to include fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for treatment, storage or disposal of wastes, liquid storage tanks, and processing areas.

2. Description of Existing Emergency Response Plans

Refer to the requirements in the original guidance.

3. Material and Waste Inventory

Refer to the requirements in the original guidance.

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[2] Significant materials includes, but is not limited to: raw materials; fuels, materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to EPCRA Section 313; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

4. Pollution Incident History

Add the following to the requirements in the original guidance for this section.

- Provide a list of significant leaks and spills[3] of toxic and hazardous pollutants that occurred in areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of three years prior to the effective date of the permit. This list shall be updated as appropriate during the permit.

5. Implementation for Plan Elements Not Currently in Place

Refer to the requirements in the original guidance.

B. Description of How Plan is Implemented by Organization

1. Organizational Structure of Facility for Implementation

Refer to the requirements in the original guidance.

2. List of Emergency Coordinators

Refer to the requirements in the original guidance.

3. Duties and Responsibilities of the Coordinator

Refer to the requirements in the original guidance.

4. Chain of Command

Refer to the requirements in the original guidance.

C. Spill Leak Prevention and Response

1. Pre-release Planning

Add the following to the requirements in the PPC guidance for this section.

- Assess the potential of various sources at the plant to contribute pollutants to storm water discharges. Each of the following shall be evaluated for the reasonable potential for contributing pollutants to runoff: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and on-site waste disposal practices. Consider the toxicity of chemicals; quantity of chemicals used, produced, or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. The description shall specifically list any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter of concern (e.g., biochemical oxygen demand).
- Describe pollution incident prevention practices in storage areas used for the storage of salts for deicing or other commercial or industrial purposes. Storage piles of salt used for deicing or other commercial or industrial purposes and which generate a storm water discharge associated with industrial activity which is discharged to a waters of the United States

[3] Significant spills includes, but is not limited to: releases of oil and hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (see 40 CFR 110.10 and CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

shall be enclosed or covered to prevent exposure to precipitation, except for exposure resulting from adding or removing materials from the pile. Dischargers shall demonstrate compliance with this provision as expeditiously as practicable, but in no event later than October 1, 1995. Piles do not need to be enclosed or covered where storm water from the pile is not discharged to waters of the United States.

2. Material Compatibility

Refer to the requirements in the PPC guidance.

3. Inspection and Monitoring Program

Add the following to the requirements in the PPC guidance for this section.

- Identify qualified personnel to conduct site compliance evaluations for storm water discharges associated with industrial activities, but in no case, less than once per year. Such evaluations will provide the following:

  Visually inspect areas contributing to storm water discharges associated with industrial activity for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings should be evaluated to determine whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan should be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, should be made.

  Based on the results of these inspections, potential pollutant sources identified (Section C) and control measures (i.e., good housekeeping, preventive maintenance, spill prevention and response), should be revised as necessary within 15 days of the inspection. The revision will provide for the implementation of any changes to the PPC plan in a timely manner, but in no case later than 90 days after the inspection.

  A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the PPC plan, and any actions taken as a result, should be retained for a period of at least one year after coverage under this permit terminates. This report will identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report should contain a certification that the facility is in compliance with the PPC plan and the permit. This report shall be signed in accordance to the signatory requirements stipulated in the general permit.

  Where annual site inspections are shown in the plan to be impractical for inactive mining sites due to the remote location and inaccessibility of the site, site inspections required under this part should be conducted at appropriate intervals specified in the plan, but, in no case less than once in three years.

4. Preventive Maintenance

Add the following to the requirements in the PPC guidance for this section.

- Describe the aspects of the preventive maintenance program. This program should involve the timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins, etc.) as well as inspecting and testing plant equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters. Records of these maintenance procedures should be maintained.

5. Housekeeping Program

Add the following to the requirements in the PPC guidance for this section.

- Establish housekeeping protocols to ensure the proper handling of materials and the maintenance of a clean, orderly facility to prevent pollutants from entering separate storm water sewers and/or to prevent contact with storm water runoff.

6. Security

Refer to the requirements in the PPC guidance.

7. External Factor Planning

Refer to the requirements in the PPC guidance.

8. Employee Training Program

Add the following to the requirements in the PPC guidance for this section.

- Employee training should inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. A pollution prevention plan shall identify periodic dates for such training.

D. Countermeasures

1. Countermeasures to be Undertaken by Facility

Refer to the requirements in the PPC guidance.

2. Countermeasures to be Undertaken by Contractors

Refer to the requirements in the PPC guidance.

3. Internal and External Communications and Alarm Systems

Refer to the requirements in the PPC guidance.

4. Evacuation Plan for Installation Personnel

Refer to the requirements in the PPC guidance.

5. Emergency Equipment Available for Response

Refer to the requirements in the PPC guidance.

E. Emergency Spill Control Network

1. Arrangements with Local Emergency Response Agencies and Hospitals

Refer to the requirements in the PPC guidance.

2. Notification Lists

Refer to the requirements in the PPC guidance.

3. Downstream Notification Requirements for Storage Tanks

Refer to the requirements in the PPC guidance.

THE ELEMENTS F THROUGH J ARE ADDENDUMS TO THE ORIGINAL GUIDANCE.

The PPC plan should also meet the requirements stipulated in these addendums to the PPC guidance. All of the management practices required for facilities (including EPCRA Section 313 facilities) are to be implemented and described in the plan.

F. Storm Water Management Practices

- Provide a narrative considering the appropriateness of traditional storm water management practices (practices other than source control) and the use of BMPs to control storm water runoff and prevent storm water pollution. Based on an assessment of the potential of various sources at the plant to contribute pollutants to storm water, provide that measures determined to be reasonable and appropriate, be implemented and maintained.

  Traditional storm water management practices are measures which reduce pollutant discharges by reducing the volume of storm water discharges, such as swales, or preventing storm water to run-on to areas of the site which conduct industrial activities. Low cost measures may include diverting rooftop or other drainage across grass swales, cleaning catch basins, and installing and maintaining oil and grit separators. Other measures may include infiltration devices and unlined retention and detention basins. Traditional storm water management practices can also include water reuse activities and snow removal activities.

- The PPC plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant source of non-storm water at the site. A description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test.

G. Sediment and Erosion Prevention

- In the PPC plan, identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify measures to limit erosion.

  Sediment and erosion prevention and control measures should be developed and implemented in accordance with Chapter 102 of the Department's rules and regulations and the Bureau of Soil and Water Conservation's "Erosion and Sediment Pollution Control Program Manual."

H. Additional Requirements for EPCRA, Section 313 Facilities[4]

- Describe the types of storm water controls (containment, drainage control and/or diversionary structures) that will be used in areas where Section 313 water priority chemicals are stored,[5] processed or otherwise handled.

  Storm water controls should provide for the following preventive systems or its equivalent: Curbing, culverting, gutters, sewers or other forms or drainage control to prevent or minimize the potential for storm water run-on to come into contact with significant sources of pollutants; or roofs, covers or other forms of appropriate protection to prevent storage piles from exposure to storm water and wind blowing.

- In addition to the minimum standards for EPCRA Section 313 facilities, the storm water pollution prevention plan will meet the following requirements for liquid storage areas, material storage areas other than liquids, truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals:

  -- Liquid storage areas where storm water comes into contact with any equipment, tank container, or other vessel used for Section 313 water priority chemicals.

- No tank or container shall be used for the storage of a Section 313 water priority chemical unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

- Secondary containment must be provided to contain the entire capacity of largest single container or tank plus sufficient freeboard to allow for precipitation, a strong spill contingency and integrity testing plan, and/or other equivalent measures. If the secondary containment and its upstream drainage system are subject to precipitation, an allowance for drainage for a 25-year, 24-hour storm event shall be provided over and above. Secondary containment shall be sufficiently impervious. Plant's treatment system may be substituted for secondary containment if it has sufficient excess holding capacity always available.

  -- Material storage areas for Section 313 water priority chemicals other than liquids.

- Material storage areas for Section 313 water priority chemicals other than liquids which are subject to runoff, leaching, or wind shall incorporate drainage or other control features which will minimize the discharge of Section 313 water priority chemicals.

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[4] An "EPCRA, Section 313 Facility" means a facility that manufactures, imports, processes, or otherwise uses listed toxic chemicals and who, pursuant to Section 313 of Title III of SARA, are required to report annually their releases of those chemicals to any environmental media.

[5] Section 313 water priority chemical means a chemical or chemical categories which: 1) Are listed at 40 CFR 372.65 pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (also known as Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986; 2) are present at or above threshold levels at a facility subject to EPCRA Section 313 reporting requirements; and 3) that meet at least one of the following criteria: (i) Are listed in Appendix D of 40 CFR 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table V (certain toxic pollutants and hazardous substances); (ii) are listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or (iii) are pollutants for which EPA has published acute or chronic water quality criteria.

-- Truck and rail car loading and unloading areas for liquid Section 313 water priority chemicals.

- These areas shall be operated to minimize discharges of Section 313 water priority chemicals. Protection such as overhangs or door skirts to enclose trailer ends at truck loading/unloading docks shall be provided as appropriate. Appropriate measures to minimize discharges of Section 313 chemicals may include: placement and maintenance of drip pans (including the proper disposal of materials collected in the drip pans where spillage may occur such as hose connections); a strong spill contingency and integrity testing plan; and/or other equivalent measures.

  -- Areas where Section 313 water priority chemicals are transferred, processed or otherwise handled.

- Processing equipment and materials handling equipment shall be operated so as to minimize the discharges of Section 313 water priority chemicals. Materials used in piping and equipment shall be compatible with the substances handled. Drainage from process and materials handling areas shall minimize storm water contact with Section 313 water priority chemicals. Additional protection such as covers or guards to prevent exposure to wind, spraying, or releases from pressure relief vents from causing a discharge of Section 313 water priority chemicals to the drainage system shall be provided as appropriate. Visual inspections or leak tests shall be provided for overhead piping conveying Section 313 water priority chemicals without secondary containment.

  -- For drainage originating from the above described areas, valves or other positive means should be used to prevent discharges or excessive leaks of Section 313 water priority chemicals. Where containment units are employed, such units may be emptied by pumps or ejectors; however, these shall be manually activated.

  Flapper-type drain valves must not be used to drain containment areas. Valves used for the drainage of containment areas should not be used to drain non-containment areas. Valves used should be of the open-and-closed design.

  If plant drainage is not engineered as above, the final discharge of all in-plant storm sewers should be equipped to be equivalent with a diversion system that could, in the event of an uncontrolled spill of a Section 313 water priority chemical, return the spilled material to the facility. Records shall be kept of the frequency and estimated volume (in gallons) of discharges from the containment areas.

  -- Records shall be kept of the frequency and estimated volume (in gallons) of discharges from containment areas.

  -- Other areas (other than those described above) of the facility from which runoff which may contain a Section 313 water priority chemical, or spills of Section 313 water priority chemicals could cause a discharge, shall incorporate the necessary drainage or other control features to prevent discharge of spilled or improperly disposed material and ensure the mitigation of pollutants in runoff or leachate.

-- All areas of the facility shall be inspected at specific intervals for leaks or conditions that could lead to discharges of Section 313 water priority chemicals or direct contact of storm water with raw materials, intermediate materials, waste materials or products. In particular, plant piping, pumps storage tanks and bins, pressure vessels, process and materials handling equipment, and material bulk storage area shall be examined for any conditions or failures which could cause a discharge. Inspection shall include examination for leaks, wind blowing, corrosion, support or foundation failure, or other forms of deterioration or noncontainment. Inspection intervals shall be specified in the plan and shall be based on design and operational experience. Different areas may require different inspection intervals. Where a leak or other condition is discovered which may result in significant releases of Section 313 water priority chemicals to the drainage system, corrective action shall be taken. When a leak or noncontainment of a Section 313 water priority chemical has occurred, contaminated soil, debris, or other material must be promptly removed and disposed in accordance with this PPC Plan.

-- Facility employees and contractor personnel using the facility shall be trained in and informed of preventive measures at the facility. Employee training shall be conducted at intervals specified in the plan, but not less than once per year, in matters of pollution control laws, and regulations and in the PPC Plan, and the particular features of the facility and its operation which are designed to minimize discharges of Section 313 water priority chemicals. The plan should designate a person who is accountable for spill prevention at the facility and who will set up the necessary spill emergency procedures and reporting requirements so that spills and emergency releases of Section 313 water priority chemicals can be isolated and contained before a discharge of a Section 313 water priority chemical can occur. Contractor or temporary personnel shall be informed of plant operation and design features in order to prevent discharges or spills from occurring.

If the installment of secondary containment structures or equipment listed above are not economically achievable at a facility, the PPC Plan should provide a spill contingency and integrity testing plan which provides a description of measures that ensure spills or other releases of toxic amounts of Section 313 water priority chemicals do not occur. The testing plan should contain the following:

-- Detailed descriptions which demonstrate that secondary containment is not economically achievable;

-- Description of response plans, personnel needs, and methods of mechanical containment such as the use or sorbents, booms collection devices, etc.); steps to be taken for removal of spilled Section 313 water priority chemicals; and access and availability of sorbents and other equipment;

-- The testing component of the alternative plan must provide for conducting integrity testing of storage tanks at least once every five years, and

conducting integrity and leak testing of valves and piping a minimum every year; and

-- A written and actual commitment of manpower, equipment and materials required to comply with this permit and to expeditiously control and remove quantity of Section 313 water priority chemicals that may result in a toxic discharge.

- Provide a certification by a Registered Professional Engineer. The Professional Engineer shall certify that he or she has examined the facility and is familiar with the provisions in the PPC Plan and can attest that the PPC Plan has been prepared in accordance with good engineering practices. The Professional Engineer must recertify the PPC Plan once a year.

I. Certification Requirements for Non-Storm Water Discharges

- Provide a certification meeting the requirements of Part C, Section 3(a) of the industrial activities stormwater general permit (PAG #3) relating to the presence of non-stormwater discharges in the system.

  If a facility does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge, this section of the plan shall indicate why the certification was not feasible. A discharge that is unable to provide the certification required by this paragraph must also then notify the Department within 180 days of the effective date of the general permit in accordance with Section A.3. of the permit.

J. Signatory Requirements

The PPC plan must be signed in accordance with the signatory requirements stipulated in the general permit.